Annual report of aggregate net probable maximum losses, financing options, and potential assessments

February 2011

This report is based upon data provided by Citizens Property Insurance Corporation and the Florida Hurricane Catastrophe Fund. It is submitted by the Office of Insurance Regulation on behalf of the Financial Services Commission to comply with Section 627.3519, Florida Statutes.
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*The Office would like to thank Citizens Property Insurance Corporation and the Florida Hurricane Catastrophe Fund for contributing data to this report. The data contained in this report has not been audited.*
Annual report of aggregate net probable maximum losses, financing options, and potential assessments

Purpose and Scope

Section 627.3519, Florida Statutes, enacted in 2006, requires the Financial Services Commission to provide a report to the Legislature regarding the aggregate net probable maximum losses, financing options and potential assessments of both the Florida Hurricane Catastrophe Fund (FHCF) and Citizens Property Insurance Corporation (Citizens). More specifically:

§ 627.3519 Annual report of aggregate net probable maximum losses, financing options, and potential assessments.--No later than February 1 of each year, the Financial Services Commission shall provide to the Legislature a report of the aggregate net probable maximum losses, financing options, and potential assessments of the Florida Hurricane Catastrophe Fund and Citizens Property Insurance Corporation. The report must include the respective 50-year, 100-year, and 250-year probable maximum losses of the fund and the corporation; analysis of all reasonable financing strategies for each such probable maximum loss, including the amount and term of debt instruments; specification of the percentage assessments that would be needed to support each of the financing strategies; and calculations of the aggregate assessment burden on Florida property and casualty policyholders for each of the probable maximum losses. The commission shall require the fund and the corporation to provide the commission with such data and analysis as the commission considers necessary to prepare the report.

Introduction

The Florida Hurricane Catastrophe Fund (the “FHCF”) and Citizens Property Insurance Corporation (“Citizens”) both play significant roles in the provision of property insurance coverage for Florida residents. Five consecutive seasons without hurricane activity affecting Florida have given both entities an opportunity to accumulate resources and otherwise prepare for future storms. Both have significant financial resources as of the end of 2010: Citizens has an estimated combined policyholders’ surplus of $4.6 billion, and the FHCF has an estimated fund balance of $5.9 billion. In addition to these resources, both entities have entered into pre-event financing arrangements that provide additional liquidity. Nonetheless, both would need to rely
on their various assessment and/or bonding capabilities to pay claims if a storm or storms of sufficient size impacted Florida. The analyses presented in this report summarize those resources and how each entity would apply them after an event.

**Aggregate Net Probable Maximum Loss**

*Florida Hurricane Catastrophe Fund*

The basic structure of the FHCF is as follows:

- The FHCF provides reimbursement to participating insurers (which comprises virtually all admitted insurers writing residential property insurance in Florida as well as Citizens) for their covered losses from hurricanes after each insurer has met its retention, or deductible. After the retention is met, the FHCF reimburses covered losses at up to 90%, with the remainder the responsibility of the insurer. For 2010, the aggregate industry retention was $7.142 billion.

- The FHCF has a mandatory layer of coverage providing up to $17.00 billion in industry-wide reimbursement for 2010.

- The FHCF also has three optional layers of coverage.
  - The Temporary Increase in Coverage Layer (“TICL”) layer, (Section 215.555(17), Florida Statutes), which provides optional coverage to all participants above the mandatory layer. For 2010, this layer could have provided up to $8 billion of additional coverage; however, actual coverage purchased by participants was $1.365 billion. For 2011, available TICL is $6 billion.
  - An additional amount of reimbursement coverage of up to $10 million per company for certain statutorily designated companies (Section 215.555(4)(b)4, Florida Statutes). In 2010, $411 million of such coverage was purchased.
  - The Temporary Emergency Additional Coverage Options (“TEACO”) layers, (Section 215.555(16), Florida Statutes), which provide for coverage at lower retention levels but significantly higher rates, ranging from 75% to 85% of the coverage purchased. No TEACO coverage was purchased in 2010.

- The FHCF pays covered losses first from fund balance, which is derived primarily from retained reimbursement premiums from participating
insurers (in 2010 the FHCF collected approximately $1.292 billion in such premiums) and investment earnings; any shortfall is designed to be paid from the proceeds of post-event bonds secured by emergency assessments levied in amounts sufficient to pay debt service on the bond issue and associated costs. These assessments can be levied in amounts totaling no more than 6% for any one season, and 10% in aggregate, and may be levied on most property and casualty insurance premiums in the State.

Table 1-FHCF

The table below shows the net probable maximum loss to the FHCF from storms of the return time specified. The loss calculations shown below were derived from the FHCF 2010 Ratemaking Formula Report done by Paragon Strategic Services, consulting actuary to the FHCF. The complete report may be found at http://fhcf.paragonbenfield.com/pdf/10ratereport.pdf

<table>
<thead>
<tr>
<th>Return Time (Years)</th>
<th>Gross Probable Maximum Loss</th>
<th>Net Losses to FHCF</th>
<th>Estimated Year-End Fund Balance</th>
<th>Assessable Shortfall</th>
</tr>
</thead>
<tbody>
<tr>
<td>250</td>
<td>$91,367,449,083</td>
<td>$18,775,874,488</td>
<td>$5,913,520,551</td>
<td>$12,862,353,937</td>
</tr>
<tr>
<td>100</td>
<td>$59,333,954,511</td>
<td>$18,775,874,488</td>
<td>$5,913,520,551</td>
<td>$12,862,353,937</td>
</tr>
<tr>
<td>50</td>
<td>$39,406,852,548</td>
<td>$18,775,874,488</td>
<td>$5,913,520,551</td>
<td>$12,862,353,937</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Coverages</th>
<th>Amount</th>
</tr>
</thead>
<tbody>
<tr>
<td>Retention</td>
<td>$7,142,000,000</td>
</tr>
<tr>
<td>Mandatory Coverage</td>
<td>$17,000,000,000</td>
</tr>
<tr>
<td>TICL Coverage</td>
<td>$1,365,005,560</td>
</tr>
<tr>
<td>Optional Coverage Below Retention 4</td>
<td>$410,868,928</td>
</tr>
</tbody>
</table>

1 Represents gross loss to all Florida residential policyholders from a storm of the indicated return time multiplied by 1.05 to allow for 5% loss adjustment expenses pursuant to FL Statutes 215.555(4)(b)1.
2 Based on actual coverages purchased by FHCF participating insurers in 2010 as shown in table above.
3 FHCF fund balance is estimated as of 12/31/10.
4 This optional coverage selected by certain statutorily designated companies, i.e. limited apportionment companies (as described in FL Statutes 627.351(6)(c)13) and companies approved to participate in the Insurance Capital Build-Up Incentive Program.

Citizens
Citizens provides property insurance coverage in Florida to individuals and businesses that meet specified statutory criteria. Citizens provides its coverage through three accounts. These accounts are separate for virtually all financial purposes, including deficit calculation and assessments. Two of the accounts – the PLA and CLA – are combined for purposes of FHCF coverage and bond security. A summary of the three accounts is as follows:

- High-Risk Account (“HRA”); the HRA provides wind-only and multi-peril coverage for policyholders (residential and commercial) in defined geographic areas near the coast.
- Personal Lines Account (“PLA”); the PLA provides multi-peril policies to homeowners throughout Florida.
- Commercial Lines Account (“CLA”); the CLA provides commercial residential (condominium association, etc.) and commercial nonresidential wind-only and commercial nonresidential multi-peril coverage throughout Florida.

Table 1-Citizens

The table below presents the aggregate net PML from storms of the return time specified for: (1) the PLA/CLA; (2) the HRA; and (3) all accounts combined. The loss calculations were done by Citizens using AIR Clasic2 v12.0.1.

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## Financing Options

**Florida Hurricane Catastrophe Fund**

The FHCF undertakes two basic types of financing: (1) pre-event financing to provide liquid funds to reimburse participating insurers in a timely manner; and (2) post-event financing designed to provide the ultimate source of payment of covered claims in excess of cash on hand.
The FHCF currently has one pre-event bond issue outstanding, in the amount of $3.5 billion, which matures in 2012; prior to the expenditure of proceeds to pay future claims, this debt is designed to be paid primarily from the interest earnings on the invested proceeds of the bonds (which are retained pending their use to pay future claims) and from reimbursement premiums. There are no assessments associated with pre-event bonds of the FHCF. If the proceeds of pre-event bonds are ever used to pay claims, it is likely that the FHCF will refinance such bonds using post-event bonds secured by emergency assessments.

The FHCF also has three series of post-event bonds outstanding, which were used to pay claims from the 2005 hurricane season. The debt service on these bonds and the associated assessment are summarized in the table below:

<table>
<thead>
<tr>
<th>Bond Year</th>
<th>Series 2006A Bonds</th>
<th>Series 2008A Bonds</th>
<th>Series 2010A Bonds</th>
<th>Total Post-Event Debt Service</th>
<th>Annual Assessment %</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Principal</td>
<td>Interest</td>
<td>Principal</td>
<td>Interest</td>
<td>Principal</td>
</tr>
<tr>
<td>2011</td>
<td>$282,660,000</td>
<td>$29,362,575</td>
<td>$0</td>
<td>$29,865,356</td>
<td>$0</td>
</tr>
<tr>
<td>2012</td>
<td>296,795,000</td>
<td>15,229,575</td>
<td>0</td>
<td>29,865,356</td>
<td>0</td>
</tr>
<tr>
<td>2013</td>
<td></td>
<td></td>
<td>300,000,000</td>
<td>29,865,356</td>
<td>0</td>
</tr>
<tr>
<td>2014</td>
<td></td>
<td></td>
<td>325,000,000</td>
<td>15,450,425</td>
<td>0</td>
</tr>
<tr>
<td>2015</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>342,455,000</td>
</tr>
<tr>
<td>2016</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>333,465,000</td>
</tr>
<tr>
<td>Total</td>
<td>$579,455,000</td>
<td>$44,592,150</td>
<td>$625,000,000</td>
<td>$105,046,494</td>
<td>$675,920,000</td>
</tr>
</tbody>
</table>

Note: Principal on Series 2006A, 2008A and 2010A Bonds is due on July 1.
1 Original bonds were issued in the amount of $1.35 billion. These amounts represent currently outstanding bonds.

All outstanding FHCF debt has a AA- rating from Standard and Poor’s, a AA rating from Fitch, and a Aa3 rating from Moody’s.

The FHCF has the statutory authority to amortize its debt over a term of up to 30 years. Given the magnitude of the losses associated with the storms summarized in “Table 1 – FHCF” above, the FHCF would probably use this full term for any bonds associated with the financing of these losses. The FHCF has the ability to issue such bonds on a tax-exempt basis to pay covered claims. It should be noted that the reshaped global financial landscape in the wake of the 2007-2008 financial crisis has made financings of this type and magnitude more difficult and costly to complete. The size and circumstances that would surround a FHCF post-event issue to pay such losses would further complicate the issuance process. Given these factors, it is uncertain whether the FHCF could in fact complete a bond issue or series of bond issues of the size necessary to pay all covered losses at assumed interest rates or at any interest rates. If long-term bonding in sufficient amounts is not immediately available, the FHCF would need to
explore alternatives, including the levying of emergency assessments with no financing, a staged financing schedule and/or interim financing alternatives. The FHCF statute provides that the FHCF's liability is limited to the amount it can actually raise from bonding and other available claims payment sources.

_Citizens_

Citizens also undertakes two basic types of financing: (1) pre-event financing to provide liquid funds to pay policyholders in a timely manner (Citizens primarily uses these financing as a “bridge” to ultimate claims-paying resources such as FHCF reimbursements or assessments); and (2) post-event financing designed to provide the ultimate source of payment of covered claims in excess of accumulated surplus, FHCF reimbursements, other reinsurance recoveries, Citizens policyholder surcharges, and regular assessments.

Citizens currently has three series of pre-event bonds outstanding (all for the HRA), totaling $3.671 billion. Of this amount, $750 million will mature prior to the 2011 hurricane season. What remains for the 2011 hurricane season is $2.921 billion in external pre-event liquidity for the HRA, and no external liquidity for the PLA/CLA. Together with Citizens’ accumulated surplus, this external liquidity provides the source of immediately available funds to pay claims. For the HRA in 2011, this is projected to be $4.753 billion ($2.921 billion of existing pre-event financing and $1.832 billion of estimated surplus as of 12-31-10), and for the PLA/CLA it is projected to be $2.721 billion (all from estimated surplus as of 12-31-10). Citizens’ pre-event bonds are paid primarily from the investment earnings on the proceeds of such bonds (which are retained pending their need to pay future claims) and from policyholder premiums. There are no assessments associated with pre-event bonds.

Citizens also has one series of post-event bonds outstanding, in the remaining par amount of $824.8 million. These bonds are being repaid from the receipts of emergency assessments that were levied beginning in March 2007 at the rate of 1.4% per year for 10 years. In December 2010, Citizens’ Board of Governors authorized a reduction in the annual assessment rate to 1.0%. Although Citizens’ assessment base is now essentially the same as the FHCF, the assessment for these bonds is levied on the historical base, which includes a much more limited range of property and casualty insurance premiums than does the current base.
Citizens’ outstanding debt – all of which is for the HRA – has long-term underlying ratings of A2 from Moody’s and A+ from Standard & Poor’s, and short-term ratings of MIG-1 from Moody’s and SP-1+ from Standard & Poor’s.

Citizens has a number of different assessments which it must use in statutorily prescribed ways to pay any deficits caused by storm losses (see the following section for a description of these various assessments). Citizens’ policyholders surcharge and regular assessments are “one-time” levies and therefore do not require financing. Only if Citizens experiences losses sufficient to use all of this “one-time” assessment authority is it obligated to levy emergency assessments; these assessments can be levied over time and used to secure post-event bond financing. Citizens does not have a specific maturity limitation on its indebtedness, but the analysis in this report assumes that Citizens would finance any remaining deficit over a 30-year period. It should be noted again that the reshaped global financial landscape in the wake of the 2007-2008 financial crisis has made financings of this type and magnitude more difficult and costly to complete. The size and circumstances that would surround a Citizens post-event issue to pay such losses would further complicate the issuance process. Given these factors, it is uncertain whether Citizens could in fact complete a bond issue or series of bond issues of the size necessary to pay all covered losses at assumed interest rates or at any interest rates. If long-term bonding in sufficient amounts is not immediately available, Citizens would need to explore alternatives, including the levying of emergency assessments with no financing, a staged financing schedule and/or interim financing alternatives.

**Assessment Impact**

*Florida Hurricane Catastrophe Fund*

As described above, the FHCF would probably attempt to finance shortfalls of the size created by the storms shown in Table 1-FHCF using post-event tax-exempt bonds amortized over a 30-year period. These bonds would be repaid using emergency assessments on all property and casualty lines of business including surplus lines but excluding workers’ compensation insurance, medical malpractice insurance, federal flood insurance, and accident and health insurance.
Table 2 - FHC F below shows the estimated annual assessment impact from the prescribed storm sizes.

<table>
<thead>
<tr>
<th>Return Time (Years)</th>
<th>Assessable Shortfall</th>
<th>Required Annual Assessment ($)</th>
<th>Required Annual Assessment (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>250</td>
<td>$12,862,353,937</td>
<td>$1,036,530,844</td>
<td>3.11%</td>
</tr>
<tr>
<td>100</td>
<td>$12,862,353,937</td>
<td>$1,036,530,844</td>
<td>3.11%</td>
</tr>
<tr>
<td>50</td>
<td>$12,862,353,937</td>
<td>$1,036,530,844</td>
<td>3.11%</td>
</tr>
</tbody>
</table>

1 Assumes annual assessment for 30 years using an interest rate of 7%. There is no certainty that assessable shortfalls can be financed at assumed interest rates, or at any interest rates. The amount which can be financed after an event could be significantly smaller and is subject to market conditions.

2 Assumes annual assessment base of $33.312 billion, which is the actual 2010 base. If this base shrinks in size, as it has done for each of the past three years, required assessment percentages would be higher than shown above.

Citizens

Citizens has a multi-layered assessment regime as prescribed by Florida Statutes. Two important features of the Citizens assessment structure are (1) each account (i.e. the HRA, PLA, and CLA) calculates its deficit separately, and each account has separate assessment authority. Therefore, there is the potential for overlapping assessments caused by deficits in more than one of the Citizens’ accounts; and (2) with the exception of emergency assessments, all Citizens’ assessments are “one-time” levies rather than multi-year assessments that can be financed. With these factors in mind, the basic construct of Citizens’ assessments for 2011 is as follows (this is not an exhaustive or technically precise description, but rather a “big-picture” summary):

(1) Any deficit in an account (defined generally as losses in excess of surplus) is first funded by Citizens’ policyholders surcharge, up to a total of 15% per account.

(2) Any remaining deficit is then funded by a regular assessment on insurance companies writing most types of property and casualty policies in Florida. The regular assessment can statutorily be levied at up to a 6% rate per account.
Any remaining deficit is paid from the proceeds of emergency assessments, which can be levied directly on policyholders of most property and casualty lines in Florida at the greater of 10% of the assessment base or 10% of the remaining deficit per account. This effectively gives Citizens the ability to finance any deficit over a 10-year period, although it could choose to finance it over a longer period. These emergency assessments would typically be used to secure post-event bonds, the proceeds of which would be used to pay policyholder claims in a timely manner.

Table 2-Citizens below shows the estimated assessment impact for each type of Citizens assessment from the prescribed storm sizes.

### Combined (PLA/CLA & HRA)

<table>
<thead>
<tr>
<th>Return Time (Years)</th>
<th>Assessable Shortfall</th>
<th>Citizens' Policyholders Surcharge¹</th>
<th>Regular Assessments¹</th>
<th>Emergency Assessments</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>$ Amount</td>
<td>%</td>
<td>$ Amount</td>
<td>%</td>
</tr>
<tr>
<td>250</td>
<td>$24,991,274,642</td>
<td>$1,171,800,000</td>
<td>45.0%</td>
<td>$5,527,440,000</td>
</tr>
<tr>
<td>100</td>
<td>$10,768,466,701</td>
<td>$1,171,800,000</td>
<td>45.0%</td>
<td>$3,575,687,333</td>
</tr>
<tr>
<td>50</td>
<td>$3,066,496,863</td>
<td>$390,600,000</td>
<td>15.0%</td>
<td>$1,842,480,000</td>
</tr>
</tbody>
</table>

¹ These assessments are one-time assessments for the first year and are not ongoing.
² Total amount of assessments represents the gross amount financed over 30 years using an assumed interest rate of 7%. There is no certainty that assessable shortfalls can be financed at assumed interest rates, or at any interest rates. The amount which can be financed after an event could be significantly smaller and is subject to market conditions.
³ Represents annual assessment over a 30 year period using an assumed interest rate of 7% and annual assessment base of $33.312 billion, which is the actual 2010 base. If this base shrinks in size, as it has done for each of the past three years, required assessment percentages would be higher than shown above.
Conclusion

The Citizens Property Insurance Corporation and the Florida Hurricane Catastrophe Fund have benefited from five years without major hurricanes making landfall in Florida. Both have substantially more resources to pay claims than in prior years. In addition, the national markets relied upon by each entity for bonding and borrowing to finance catastrophe claim payments have improved over prior years. However, the exposure of Citizens to catastrophic risk has grown. It is the largest insurer in the Florida property market with over 1.2 million policyholders. Strategic methods for encouraging the movement of capital and property insurance policies to the private market should be employed as quickly as possible to reduce the likelihood and magnitude of assessments on the people and businesses of Florida.