

**State:** Arkansas **Filing Company:** Liberty Mutual Fire Insurance Company  
**TOI/Sub-TOI:** 01.0 Property/01.0002 Personal Property (Fire and Allied Lines)  
**Product Name:** DF  
**Project Name/Number:** Premium Deviation Revision /AR DF SR 02 13

## Filing at a Glance

Company: Liberty Mutual Fire Insurance Company  
 Product Name: DF  
 State: Arkansas  
 TOI: 01.0 Property  
 Sub-TOI: 01.0002 Personal Property (Fire and Allied Lines)  
 Filing Type: Rate  
 Date Submitted: 12/11/2012  
 SERFF Tr Num: LBPM-128785910  
 SERFF Status: Closed-Filed  
 State Tr Num:  
 State Status:  
 Co Tr Num: AR DF SR 02 13  
  
 Effective Date: 02/24/2013  
 Requested (New):  
 Effective Date: 04/17/2013  
 Requested (Renewal):  
 Author(s): Andrew Larson  
 Reviewer(s): Becky Harrington (primary)  
 Disposition Date: 12/14/2012  
 Disposition Status: Filed  
 Effective Date (New): 02/24/2013  
 Effective Date (Renewal): 04/17/2013

State Filing Description:  
 meeting 12/14

State: Arkansas Filing Company: Liberty Mutual Fire Insurance Company  
 TOI/Sub-TOI: 01.0 Property/01.0002 Personal Property (Fire and Allied Lines)  
 Product Name: DF  
 Project Name/Number: Premium Deviation Revision /AR DF SR 02 13

**General Information**

Project Name: Premium Deviation Revision Status of Filing in Domicile: Not Filed  
 Project Number: AR DF SR 02 13 Domicile Status Comments:  
 Reference Organization: Reference Number:  
 Reference Title: Advisory Org. Circular:  
 Filing Status Changed: 12/14/2012  
 State Status Changed: 12/14/2012 Deemer Date:  
 Created By: Andrew Larson Submitted By: Andrew Larson  
 Corresponding Filing Tracking Number:

Filing Description:

In accordance with the "file and use" provision, Liberty Mutual Fire Insurance Company (LMFIC) request the following rate revisions in the state of Arkansas. These revisions are applicable to all policies produced and effective on or after February 24, 2013 and renewal policies on or after April 17, 2013.

**Company and Contact**

**Filing Contact Information**

Andrew Larson, Assistant Director Product Andrew.Larson@LibertyMutual.com  
 Management  
 175 Berkeley Street 617-574-5873 [Phone]  
 Mailstop 04G/H 617-654-3452 [FAX]  
 Boston, MA 02116

**Filing Company Information**

Liberty Mutual Fire Insurance CoCode: 23035 State of Domicile: Wisconsin  
 Company Group Code: 111 Company Type:  
 175 Berkeley Street Group Name: Liberty Mutual State ID Number:  
 Boston, MA 02116 Group  
 (617) 357-9500 ext. [Phone] FEIN Number: 04-1924000

**Filing Fees**

Fee Required? Yes  
 Fee Amount: \$100.00  
 Retaliatory? Yes  
 Fee Explanation:  
 Per Company: No

Company	Amount	Date Processed	Transaction #
Liberty Mutual Fire Insurance Company	\$100.00	12/11/2012	65649907

**SERFF Tracking #:**

LBPM-128785910

**State Tracking #:****Company Tracking #:**

AR DF SR 02 13

**State:**

Arkansas

**Filing Company:**

Liberty Mutual Fire Insurance Company

**TOI/Sub-TOI:**

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Premium Deviation Revision /AR DF SR 02 13

## Correspondence Summary

### Dispositions

Status	Created By	Created On	Date Submitted
Filed	Becky Harrington	12/14/2012	12/14/2012

### Objection Letters and Response Letters

#### Objection Letters

Status	Created By	Created On	Date Submitted
No response necessary	Becky Harrington	12/12/2012	12/12/2012

#### Response Letters

Responded By	Created On	Date Submitted
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**State:** Arkansas **Filing Company:** Liberty Mutual Fire Insurance Company  
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## Disposition

Disposition Date: 12/14/2012  
 Effective Date (New): 02/24/2013  
 Effective Date (Renewal): 04/17/2013  
 Status: Filed

Comment:

Company Name:	Overall % Indicated Change:	Overall % Rate Impact:	Written Premium Change for this Program:	# of Policy Holders Affected for this Program:	Written Premium for this Program:	Maximum % Change (where req'd):	Minimum % Change (where req'd):
Liberty Mutual Fire Insurance Company	11.600%	10.000%	\$16,725	161	\$184,442	10.300%	0.000%

Schedule	Schedule Item	Schedule Item Status	Public Access
Supporting Document	Form RF-1 NAIC Loss Cost Data Entry Document--All P&C Lines	Filed	Yes
Supporting Document	HPCS-Homeowners Premium Comparison Survey	Filed	Yes
Supporting Document	NAIC Loss Cost Filing Document for OTHER than Workers' Comp		Yes
Supporting Document	P&C Actuarial Justification	Filed	Yes
Supporting Document	Cover Letter	Filed	Yes
Rate	Rating Manual	Filed	Yes

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## Objection Letter

Objection Letter Status	No response necessary
Objection Letter Date	12/12/2012
Submitted Date	12/12/2012
Respond By Date	

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Dear Andrew Larson,

**Introduction:**

*This will acknowledge receipt of the captioned filing.*

*This filing is being referred to the Commissioner for review due to the requested increase amount being greater than 6%. Please do not respond at this time.*

**Conclusion:**

*NOTICE regarding, corrections to filings and scrivener's Errors:*

*Effective for all filings made on or after June 1, 2011, Arkansas no longer allows the re-opening of closed filings for corrections, changes in effective dates, scrivener's errors, amendments or substantive changes. Please see the General Instructions for how these events will be handled after the effective date of the change."*

*In accordance with Regulation 23, Section 7.A., this filing may not be implemented until 20 days after the requested amendment(s) and/or information is received.*

Sincerely,

Becky Harrington

SERFF Tracking #:

LBPM-128785910

State Tracking #:

Company Tracking #:

AR DF SR 02 13

State:

Arkansas

Filing Company:

Liberty Mutual Fire Insurance Company

TOI/Sub-TOI:

01.0 Property/01.0002 Personal Property (Fire and Allied Lines)

Product Name:

DF

Project Name/Number:

Premium Deviation Revision /AR DF SR 02 13

## Rate Information

Rate data applies to filing.

Filing Method:

File and Use

Rate Change Type:

Increase

Overall Percentage of Last Rate Revision:

9.800%

Effective Date of Last Rate Revision:

02/24/2011

Filing Method of Last Filing:

File and Use

## Company Rate Information

Company Name:	Overall % Indicated Change:	Overall % Rate Impact:	Written Premium Change for this Program:	# of Policy Holders Affected for this Program:	Written Premium for this Program:	Maximum % Change (where req'd):	Minimum % Change (where req'd):
Liberty Mutual Fire Insurance Company	11.600%	10.000%	\$16,725	161	\$184,442	10.300%	0.000%

**SERFF Tracking #:**

LBPM-128785910

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**State:**

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Liberty Mutual Fire Insurance Company

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Premium Deviation Revision /AR DF SR 02 13

## Rate/Rule Schedule

Item No.	Schedule Item Status	Exhibit Name	Rule # or Page #	Rate Action	Previous State Filing Number	Attachments
1	Filed 12/14/2012	Rating Manual	LM-1	Replacement	LBPM-126936137	LM1 Proof.pdf

**LIBERTY MUTUAL FIRE INSURANCE COMPANY**  
**DWELLING POLICY PROGRAM**  
**LIBERTY MUTUAL FIRE INSURANCE COMPANY**  
**PREMIUM DEVIATION PAGE**

The Premium Deviation of +122.7% (2.272) is applicable to Forms DP 00 01, DP 00 02 and DP 00 03.

A +122.7% deviation (2.272 rating factor) is to be applied separately to the premium computation for these coverages when applicable.

- |   |                         |
|---|-------------------------|
| 1. Fire building                                  | 7. VMM building         |
| 2. Fire other structure                           | 8. VMM other structures |
| 3. Fire contents                                  | 9. VMM contents         |
| 4. Extended, Broad and Special buildings          | 10. Broad Form theft    |
| 5. Extended, Broad and Special structures – other | 11. Limited Form theft  |
| 6. Extended and Broad contents                    | 12. Personal liability  |

**Arkansas**  
**LM-1**

**Effective: February 24, 2013**

**SERFF Tracking #:**

LBPM-128785910

**State Tracking #:****Company Tracking #:**

AR DF SR 02 13

**State:**

Arkansas

**Filing Company:**

Liberty Mutual Fire Insurance Company

**TOI/Sub-TOI:**

01.0 Property/01.0002 Personal Property (Fire and Allied Lines)

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DF

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Premium Deviation Revision /AR DF SR 02 13

## Supporting Document Schedules

		<b>Item Status:</b>	<b>Status Date:</b>
Satisfied - Item:	Form RF-1 NAIC Loss Cost Data Entry Document--All P&C Lines	Filed	12/14/2012
Comments:			
Attachment(s):	FORM RF-1 Rate Filing Abstract.pdf		

		<b>Item Status:</b>	<b>Status Date:</b>
Satisfied - Item:	HPCS-Homeowners Premium Comparison Survey	Filed	12/14/2012
Comments:			
Attachment(s):	HO Survey FORM HPCS.xls HO Survey FORM HPCS.pdf		

		<b>Item Status:</b>	<b>Status Date:</b>
Satisfied - Item:	P&C Actuarial Justification	Filed	12/14/2012
Comments:			
Attachment(s):	AR DF Actuarial Justification 1211.pdf		

		<b>Item Status:</b>	<b>Status Date:</b>
Satisfied - Item:	Cover Letter	Filed	12/14/2012
Comments:			
Attachment(s):	AR DF Cvr Letter.pdf		

### NAIC LOSS COST DATA ENTRY DOCUMENT

1. This filing transmittal is part of Company Tracking #	AR DF SR 02 13
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2. If filing is an adoption of an advisory organization loss cost filing, give name of Advisory Organization and Reference/ Item Filing Number	
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Company Name		Company NAIC Number		
3.	A.	<b>Liberty Mutual Fire Insurance Company</b>	B.	<b>0111-23035</b>

Product Coding Matrix Line of Business (i.e., Type of Insurance)		Product Coding Matrix Line of Insurance (i.e., Sub-type of Insurance)		
4.	A.	<b>01.0 Property</b>	B.	<b>01.0002 Personal Property (Fire and Allied Lines)</b>

5.			FOR LOSS COSTS ONLY				
(A) COVERAGE (See Instructions)	(B) Indicated % Rate Level Change	(C) Requested % Rate Level Change	(D) Expected Loss Ratio	(E) Loss Cost Modification Factor	(F) Selected Loss Cost Multiplier	(G) Expense Constant (If Applicable)	(H) Co. Current Loss Cost Multiplier
Dwelling Fire	11.6%	10.0%					
TOTAL OVERALL EFFECT	11.6%	10.0%					

6.		5 Year History	Rate Change History				
Year	Policy Count	% of Change	Effective Date	State Earned Premium (000)	Incurred Losses (000)	State Loss Ratio	Countrywide Loss Ratio
2007	188			124,474	393,972	316.5%	62.0%
2008	181			132,788	152,291	114.7%	84.4%
2009	167	15.0%	04/15/09	130,651	144,478	110.6%	71.2%
2010	166	15.0%	04/15/10	148,549	90,594	61.0%	60.5%
2011	164	9.8%	04/09/11	167,085	142,983	85.6%	55.3%

7.	
Expense Constants	Selected Provisions
B. General Expense	0%
C. Taxes, License & Fees	3.8%
D. Underwriting Profit & Contingencies	16.1%
E. Other (explain)	0%
F. TOTAL	42.1%

8.   N   Apply Lost Cost Factors to Future filings? (Y or N)
9.        Estimated Maximum Rate Increase for any Insured (%). Territory (if applicable):   10.3%   Territory   33
10.        Estimated Maximum Rate Decrease for any Insured (%) Territory (if applicable):   0.0%   Territory   33

NAIC Number: 111-23035  
 Company Name: Liberty Mutual Fire Insurance Company  
 Contact Person: Zach Binkley  
 Telephone No.: (617)357-9500 ext. 42878  
 Email Address: zachary.binkley@libertymutual.com  
 Effective Date: 24-Feb-13

**Homeowners Premium Comparison Survey Form  
 FORM HPCS - last modified August, 2005**

Submit to: Arkansas Insurance Department  
 1200 West Third Street  
 Little Rock, AR 72201-1904  
 Telephone: 501-371-2800  
 Email as an attachment to insurance.pnc@arkansas.gov  
 You may also attach to a SERFF filing or submit on a cdr disk

**USE THE APPROPRIATE FORM BELOW - IF NOT APPLICABLE, LEAVE  
 BLANK**

**Survey Form for HO3 (Homeowners) - Use \$500 Flat Deductible (Covers risk of direct physical loss for dwelling and other structures; named perils for personal property, replacement cost on dwelling, actual cash value on personal property)**

Public Protection Class	Dwelling Value	Washington		Baxter		Craighead		St. Francis		Desha		Union		Miller		Sebastian		Pulaski	
		Brick	Frame	Brick	Frame	Brick	Frame	Brick	Frame	Brick	Frame	Brick	Frame	Brick	Frame	Brick	Frame	Brick	Frame
3	\$80,000																		
	\$120,000																		
	\$160,000																		
6	\$80,000																		
	\$120,000																		
	\$160,000																		
9	\$80,000																		
	\$120,000																		
	\$160,000																		

**Survey Form for HO4 (Renters) - Use \$500 Flat Deductible (Named perils for personal property, actual cash value for loss, liability and medical payments for others included)**

Public Protection Class	Property Value	Washington		Baxter		Craighead		St. Francis		Arkansas		Union		Miller		Sebastian		Pulaski	
		Brick	Frame	Brick	Frame	Brick	Frame	Brick	Frame	Brick	Frame	Brick	Frame	Brick	Frame	Brick	Frame	Brick	Frame
3	\$5,000																		
	\$15,000																		
	\$25,000																		
6	\$5,000																		
	\$15,000																		
	\$25,000																		
9	\$5,000																		
	\$15,000																		
	\$25,000																		

**Survey Form for DP-2 (Dwelling/Fire) - Use \$500 Flat Deductible (Named perils for dwelling and personal property; replacement cost for dwelling, actual cash value for personal property, no liability coverage)**

Public Protection Class	Dwelling Value	Washington		Baxter		Craighead		St. Francis		Arkansas		Union		Miller		Sebastian		Pulaski	
		Brick	Frame	Brick	Frame	Brick	Frame	Brick	Frame	Brick	Frame	Brick	Frame	Brick	Frame	Brick	Frame	Brick	Frame
3	\$80,000	\$845.00	\$1,001.00	\$845.00	\$1,001.00	\$845.00	\$1,001.00	\$845.00	\$1,001.00	\$845.00	\$1,001.00	\$845.00	\$1,001.00	\$845.00	\$1,001.00	\$845.00	\$1,001.00	\$845.00	\$1,001.00
	\$120,000	\$1,142.00	\$1,349.00	\$1,142.00	\$1,349.00	\$1,142.00	\$1,349.00	\$1,142.00	\$1,349.00	\$1,142.00	\$1,349.00	\$1,142.00	\$1,349.00	\$1,142.00	\$1,349.00	\$1,142.00	\$1,349.00	\$1,142.00	\$1,349.00
	\$160,000	\$1,439.00	\$1,697.00	\$1,439.00	\$1,697.00	\$1,439.00	\$1,697.00	\$1,439.00	\$1,697.00	\$1,439.00	\$1,697.00	\$1,439.00	\$1,697.00	\$1,439.00	\$1,697.00	\$1,439.00	\$1,697.00	\$1,439.00	\$1,697.00
6	\$80,000	\$845.00	\$1,001.00	\$845.00	\$1,001.00	\$845.00	\$1,001.00	\$845.00	\$1,001.00	\$845.00	\$1,001.00	\$845.00	\$1,001.00	\$845.00	\$1,001.00	\$845.00	\$1,001.00	\$845.00	\$1,001.00
	\$120,000	\$1,142.00	\$1,349.00	\$1,142.00	\$1,349.00	\$1,142.00	\$1,349.00	\$1,142.00	\$1,349.00	\$1,142.00	\$1,349.00	\$1,142.00	\$1,349.00	\$1,142.00	\$1,349.00	\$1,142.00	\$1,349.00	\$1,142.00	\$1,349.00
	\$160,000	\$1,439.00	\$1,697.00	\$1,439.00	\$1,697.00	\$1,439.00	\$1,697.00	\$1,439.00	\$1,697.00	\$1,439.00	\$1,697.00	\$1,439.00	\$1,697.00	\$1,439.00	\$1,697.00	\$1,439.00	\$1,697.00	\$1,439.00	\$1,697.00
9	\$80,000	\$1,162.00	\$1,513.00	\$1,162.00	\$1,513.00	\$1,162.00	\$1,513.00	\$1,162.00	\$1,513.00	\$1,162.00	\$1,513.00	\$1,162.00	\$1,513.00	\$1,162.00	\$1,513.00	\$1,162.00	\$1,513.00	\$1,162.00	\$1,513.00
	\$120,000	\$1,563.00	\$2,028.00	\$1,563.00	\$2,028.00	\$1,563.00	\$2,028.00	\$1,563.00	\$2,028.00	\$1,563.00	\$2,028.00	\$1,563.00	\$2,028.00	\$1,563.00	\$2,028.00	\$1,563.00	\$2,028.00	\$1,563.00	\$2,028.00
	\$160,000	\$1,961.00	\$2,541.00	\$1,961.00	\$2,541.00	\$1,961.00	\$2,541.00	\$1,961.00	\$2,541.00	\$1,961.00	\$2,541.00	\$1,961.00	\$2,541.00	\$1,961.00	\$2,541.00	\$1,961.00	\$2,541.00	\$1,961.00	\$2,541.00

**SPECIFY THE PERCENTAGE GIVEN FOR CREDITS OR DISCOUNTS FOR THE FOLLOWING:**

**HO3 and HO4 only**

Fire Extinguisher	<input type="text"/>	%	Deadbolt Lock	<input type="text"/>	%
Burglar Alarm	<input type="text"/>	%	Window Locks	<input type="text"/>	%
Smoke Alarm	<input type="text"/>	%	\$1,000 Deductible	<input type="text"/>	%
			Other (specify)	<input type="text"/>	%

**EARTHQUAKE INSURANCE**

**IMPORTANT, homeowners insurance does NOT automatically cover losses from earthquakes. Ask your agent about this cov**

ARE YOU CURRENTLY WRITING EARTHQUAKE COVERAGE IN ARKANSAS?	<input type="text"/>	(yes or no)	
WHAT IS YOUR PERCENTAGE DEDUCTIBLE?	<input type="text"/>	%	
WHAT IS YOUR PRICE PER \$1,000 OF COVERAGE?	Zone	Brick	Frame
	Highest Risk	\$ <input type="text"/>	\$ <input type="text"/>

Maximum Credit Allowed	%	Lowest Risk	\$		\$	
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**H.O. Personal Market State Management**  
**November 27, 2012**

To: **H.O. Personal Market Compliance**  
**PM Filing Request**

From: Zach Binkley

cc: **H. O. Personal Market Product Management/Compliance (cover only)**  
 L. Bradley  
**H. O. Personal Market State Management (cover only)**  
 E. King, K. Tolman, A. Larson, M. Acquaviva  
**Full Copy to File (2012 Arkansas DF SR)**

RE: **Arkansas Dwelling Fire Rate Filing Effective February 24, 2013(NB) – April 17, 2013 (RB)**

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Attached please find the actuarial justification for the Arkansas Dwelling Fire Rate Filing.

This revision will have the following rate effect by increasing our deviation factor from 2.065 to 2.272

Coverage	Effect
Coverage A	10.0%
Coverage C	10.0%
Total	10.0%
Premium Effect	\$16,725

Please let me know if you have any questions or need additional information.

**Liberty Mutual Group  
Arkansas Dwelling Fire Rate Filing- Actuarial Justification**

**Table of Contents**

Section I	Summary of Rate Filing
Section II	Dwelling Fire and Allied Lines Calendar/Accident Year Rate Level Indications
Section III	Profit Provision and Investment Income Analysis

## **I. Summary of Rate Filing**

The overall rate change proposed in the filing is +10.0%. The proposed effective date for these changes is February 24, 2013 for new business and April 17, 2013 for renewal business. The premium effect of the proposed change of increasing the deviation factor from 2.065 to 2.272 is estimated to be \$16,725.

## **Past and Prospective Experience**

Arkansas Calendar/Accident Year data for the five-year period ending December 31, 2011 is used in determining our overall rate level needed. The rate level indication is +11.6%. Our Fire & Allied Lines data used to develop the indication is 10% credible. The calculation of the indication is explained, and supporting data provided, in Section II.

## **Expenses**

The expense provision used in the indication is based on 2012 planned expenses for Arkansas Homeowners for Liberty Mutual.

## **Reasonable Profit Margin**

Our margin of 15.6% for profit and contingencies is calculated and explained in Section III. This margin is calculated to allow a return on surplus of 15.0%, with a 1.25:1 premium-to-surplus model.

## II. Rate Indication and Supporting Data

Liberty Mutual's state-specific rate level indication is used for Arkansas and is calculated from five years of historical premium and loss experience, with adjustments made for loss and premium, including adjustments to smooth the effects of catastrophe losses. The attached exhibits explain how the historical data is developed and adjusted to project premium and loss levels for the proposed effective period and to determine the indicated rate change. Exhibit II-A summarizes the calculation of the rate-level indication and displays each item incorporated into the calculation. Exhibits II-B through II-H provide further detail on specific calculations and projections.

Below is a description of each item contributing to the rate-level indication (as summarized in Exhibit II-A), including an explanation of the modifications made to the reported data to project future experience:

The attached exhibits display Liberty Mutual's historical Fire & Allied Lines data and develop it to projected experience level of the future. On the basis of this projected experience, an indicated rate level change is calculated. Below is a description of the modifications made to the reported data to achieve our indication.

- 1a. Reported Earned Premium – The direct earned premiums for the latest five calendar years are listed.
- 1b. Earned Exposures - The earned exposures for the latest five calendar years are listed.
- 2a. On Level Factors – These factors represent the adjustment to Reported Earned Premium to place the experience on the current rate level. They are determined using the parallelogram method and the state's rate change history.
- 2b. Premium Trend Factors – These factors are developed to reflect changes in the amount of coverage selected by the insured.
3. Earned Premium at Current Level – These result from multiplying the Reported Earned Premium (1a) with the On Level Factors (2a) and the Premium Trend Factors (2b).
4. Total Incurred Loss - These are the statewide total reported losses for the five accident years ending December 31, 2011, evaluated as of December 31, 2011.
5. X-Cat X-Severe Storm Incurred Loss - To recognize the erratic nature of unusual catastrophe events and to provide stability in the ratemaking process, incurred catastrophic and severe storm losses are removed from Total Incurred Losses (4) to produce X-Cat X-Severe Storm Incurred Losses.
6. Loss Development Factor – x-Cat x-Severe Storm Incurred Losses are developed to their ultimate value by use of loss development factors. Our selected factors are based on an analysis of accident year losses evaluated at common ages and the patterns exhibited as incurred losses change from their initial valuation to final settlement. The factors selected and the supporting data are presented in Exhibit II-D.
7. Loss Trend Factors – Using Liberty Mutual's Homeowners "Fast Track" loss data for Arkansas,

and the Southwest region, an annual rate of change (trend) in expected loss costs is determined. The Loss Trend Factors measure the effect of inflation on past claim costs. The factors are indexed from the average date of loss in the accident year to the average accident date in the latest experience period (7/1/2011). The factors selected and the supporting data and calculations are presented in Exhibit II-E.

8. Adjusted Normal Losses – x-Cat x-Severe Storm Incurred losses are multiplied by the appropriate loss development factor and loss trend factor.

Note: At this point in the rate indication process, the loss data have been adjusted to remove catastrophic loss activity and developed to their ultimate level. Premiums and losses have also been trended to the present time and will now be projected into the period during which the proposed rates will become effective.

9. Loss Ratio Weights - These weights are used to combine the adjusted loss ratios of each year in the experience period into a single representative loss ratio. Equal weights are applied to all years.
10. Adjusted Normal Loss Ratio - This is the Adjusted Normal Losses (8) divided by the Earned Premium at Current Level (3) for each calendar/accident year separately.
11. Weighted Normal Loss Ratio - This is the result of multiplying each year's Adjusted Normal Loss Ratio by its respective weight and adding the products.
12. Factor for Non-Hurricane Non-Severe Storm Catastrophes - This provision is for any expected catastrophic activity that is not hurricane or severe storm related. The expected Non-Hurricane Non-Severe Storm loss per \$1000 of amount of insurance factor is selected based upon 17 years of Liberty Mutual Fire and Allied Lines historical non-hurricane non-severe storm catastrophe experience. The calculation of this provision, along with supporting data, is presented in Exhibit II-F.
- 12a. Provision for Hurricane Losses – As per the DOI request in last year's filing, we have removed the provision for hurricane losses.
- 12b. Provision for Severe Storm Losses – As per the DOI request in last year's filing, this provision is based on historical severe storm losses.
13. Premium Projection Factor - This factor adjusts premium to the coverage levels expected to be purchased by our customers in the time periods when the proposed rates will be in effect. The calculation of this factor is presented in Exhibit II-B.
14. Loss Projection Factor - The Loss Projection Factor is used to project losses from the average accident date in the latest experience period (July 1, 2011) to the average accident date of one year beyond the proposed effective date of the rate revision (February 24, 2014). The calculation of this factor is presented with the calculation of the historical loss trend factors in Exhibit II-E.
15. Loss Ratio Projection Factor - This factor is the ratio of the Loss Projection Factor (14) and the Premium Projection Factor (13) calculated above.

16. Loss Adjustment Expense Factor - To include Loss Adjustment Expense (LAE), a factor is calculated based upon the most recent three years of LAE to loss ratios for the Southwest region.
17. House-Years in Experience Period - This is the total number of earned house-years where one house-year is defined to be one house insured for 12 months.
18. Credibility - Credibility is a measure of the confidence assigned to a particular body of data for ratemaking purposes. Full credibility is defined to be 80,000 earned house-years. In this step, credibility to be assigned to the company's non-hurricane non-severe storm loss experience is calculated. The calculation of this credibility standard is presented in Exhibit II-H.
19. Projected Non-hurricane Non-Severe Storm Loss and LAE Ratio - In this step, the experience period Normal Loss Ratio is adjusted for LAE and expected Non-Hurricane Non-Severe Storm Catastrophic activity. Then, this ratio is projected to its future level by applying the Loss Ratio Projection Factor. For the expected Non-Hurricane Non-Severe Storm Catastrophic activity, since AOI is already projected into the future, the loss projection portion of the loss ratio trend is backed out so as not to double count losses.
20. Projected Total Loss and LAE Ratio - The Provisions for Non-Hurricane, Non-Severe Storm Cat, Hurricane, and Severe Storm Losses are projected to the future level and adjusted for LAE. This ratio is added to the projected x-CAT Loss and LAE Ratio to obtain the Projected Total Loss and LAE Ratio.
21. Fixed Provision for Acquisition and General Expense - The expense covers policy issuance, sales staffing, and other administrative functions. Based on an internal expense analysis, 74% of Acquisition and General Expenses are fixed. The supporting expense data is presented in Exhibit II-G.
  - 21a. Variable Provision for Acquisition and General Expense – These items vary directly with premium. The supporting expense data is presented in Exhibit II-G.
  - 21b. Provision for Reinsurance Cost – The total reinsurance cost to Liberty Mutual for Fire and Allied Lines was allocated to each state based on the state's participation in all direct losses above \$550 Million. \$550 Million is Liberty Mutual's corporate reinsurance treaty attachment point.
  - 21c. Provision for Taxes, Licenses, Fees, and Profit & Contingency - These items vary directly with premium.
22. Permissible Loss and LAE & Expense Ratio - From unity, items (21a) and (21c) are subtracted.
23. Indicated Rate Change - The Projected Total Loss & LAE, Fixed Expense Ratio and Provision for Reinsurance Expense are added together and divided by the Permissible Loss, LAE and Expense Ratio.
24. Selected Rate Change

**Exhibit II-A: Dwelling Fire Rate Level Indication**

Liberty Mutual Group  
Arkansas  
Fire and Allied  
Indicated Rate Level Change  
Evaluated as of 12/31/2011

Proposed NB  
Effective date:  
**2/24/2013**

(1)	(1a)	(1b)	(2a)	(2b)	(3)	(4)	(5)	
Accident	Year	Earned	Earned	On-Level	Prem Trend	E/P at Current	Total Incurred	xCat xSS Incurred
<u>Ending</u>	<u>Premium</u>	<u>Exposures</u>	<u>Factor</u>	<u>Factor</u>	<u>Level</u>	<u>Loss</u>	<u>Loss</u>	
12/31/2007	124,474	196	1.539	1.028	196,968	393,972	388,442	
12/31/2008	132,788	184	1.452	1.021	196,899	152,291	75,653	
12/31/2009	130,651	172	1.398	1.014	185,279	144,478	94,719	
12/31/2010	148,549	167	1.222	1.007	182,842	90,594	57,603	
<u>12/31/2011</u>	<u>167,096</u>	<u>164</u>	<u>1.077</u>	<u>1.000</u>	<u>179,984</u>	<u>142,983</u>	<u>79,767</u>	
Total	703,558	883			941,973	924,317	696,185	

  

(6)	(7)	(8)	(8a)	(8b)	(9)	(10)	
Accident	Loss	Loss	Adjusted	Complement	Cred. Adj.	Adjusted	
Year	Development	Trend	Normal	CW PP =	Normal	Loss Ratio	Normal
<u>Ending</u>	<u>Factor</u>	<u>Factor</u>	<u>Loss</u>	<u>260*Exposure</u>	<u>Loss</u>	<u>Weights</u>	<u>Loss Ratio</u>
12/31/2007	1.000	1.216	472,154	50,969	93,088	0.2	47.3%
12/31/2008	1.000	1.158	87,578	47,752	51,735	0.2	26.3%
12/31/2009	1.000	1.103	104,428	44,826	50,786	0.2	27.4%
12/31/2010	1.000	1.050	60,483	43,494	45,193	0.2	24.7%
<u>12/31/2011</u>	<u>1.020</u>	<u>1.000</u>	<u>81,357</u>	<u>42,534</u>	<u>46,416</u>	<u>0.2</u>	<u>25.8%</u>
Total			806,000	229,575	287,218		

  

11) Weighted Normal Loss Ratio	0.303
12) Factor for Non-hurricane Non-Severe Storm Catastrophes	0.007
12a) Provision for Hurricane Losses	0.000
12b) Provision for Severe Storm Losses	0.159
13) Premium Projection Factor	1.019
14) Loss Projection Factor	1.233
15) Loss Ratio Projection Factor	1.210
16) Loss Adjustment Expense Factor	1.171
17) House Years in Experience Period	883
18) Credibility = Square root of [(17)/80,000] (max = 1.0)	10%
19) Projected Non-hurricane Loss & LAE Ratio: [(11)*(15)+(12)/(13)]*(16)	0.438
20) Projected Total Loss & LAE Ratio: (19)+[(12a)+(12b)]*(16)/(13)	0.621
21) Fixed Provision for Acquisition & General Expense	0.197
21a) Variable Provision for Acquisition & General Expense	0.069
21b) Provision for Reinsurance Cost	0.001
21c) Provision for Tax, Licenses, Fees, Profit & Contingency	0.198
22) Permissible Loss and LAE, and Expense [1.0 - (21a) - (21c)]	0.733
23) Indicated Rate Change $\{[(20)+(21)+(21b)]/(22) - 1.0\}$	<b>11.6%</b>
24) Selected Rate Change	<b>10.0%</b>

### Exhibit II-B: Determination of Premium Trend and Premium Projection Factor

To reflect changes in the amounts of coverage purchased by our policyholders over time, the premium trend factors have been developed. These factors reflect any changes in the average on-leveled earned premium including the increasing amounts of insurance purchased due to inflation, shifts towards higher deductibles, changes in territory mix, etc. The premium trend factor for each year is the ratio of the projected average on-leveled premium in the last year of the experience to the average on-leveled premium in a given year.

To project premium to the average earned day after the proposed effective date, the premium projection factor is applied. This factor is developed based upon a review of Liberty Mutual Dwelling Fire data and is equal to 1.019.

#### Development of Premium Trend Factors

Annual Premium Trend = +0.7%  
Final Day of Experience Period = 12/31/2011

Calendar Year Ending	Avg Earned Date			
12/31/07	07/01/07	4.0 1.007	=	1.028
12/31/08	07/01/08	3.0 1.007	=	1.021
12/31/09	07/01/09	2.0 1.007	=	1.014
12/31/10	07/01/10	1.0 1.007	=	1.007
12/31/11	07/01/11	0.0 1.007	=	1.000

#### Calculation of Premium Projection Factor

1) Annual Premium Trend Based on Liberty Data	0.7%
2) Average Earned Date of Last Year of Experience Period	07/01/11
3) Effective Date for Proposed Rates	02/24/13
4) Average Earned Date Under Proposed Rates	02/24/14
5) Number of Months Between (2) And (4)	31.9
6) Premium Projection Factor	

$$\{1\}^{\{5\}/12} = 1.019$$

**Exhibit II-C: Development of Current Rate Factor**

Current Rate Factors have been calculated based upon Liberty Mutual's historical rate changes in Arkansas. They are applied to Reported Earned Premiums to bring the earned premiums to what they would have been had they been written at today's rate. The Current Rate Factors are determined using the parallelogram method.

**Rate Changes Not Fully Reflected In Earned Premium**

<u>Date</u>	<u>Rate Change</u>
04/15/2009	15.0%
04/15/2010	15.0%
04/17/2011	9.8%

**On Level Factors Calculated Based On Rate Changes Above**

<u>Period</u> <u>Ending</u>	<u>On-Level</u> <u>Factors</u>
12/31/2007	1.539
12/31/2008	1.452
12/31/2009	1.398
12/31/2010	1.222
12/31/2011	1.077

**Exhibit II-D: Loss Development**

We have calculated loss development factors based upon Liberty Mutual's countrywide experience for Fire and Allied Lines. Catastrophe and severe storm losses are excluded. We have selected the following ultimate factors based on this experience.

<u>Age as of December 31, 2011</u>	<u>Development Factor</u>
12 months	1.020
24 months	1.000
36 months	1.000
48 months	1.000
60 months	1.000

The loss development triangle from which the above factors were selected is provided on the following page.

**Countrywide Fire and Allied Lines**  
**Loss Development Excluding Catastrophes and Severe Storms**

**Liberty Mutual Group**  
**Countrywide**  
**Fire and Allied x-CAT Incurred Losses**

Accident Year Ending	12	24	36	48	60	72	84	96	108	120	132	144
Jan2000-Dec2000	9,730,910	10,189,871	10,493,629	10,540,376	10,650,035	11,086,966	10,947,617	10,951,617	10,951,617	10,755,296	10,755,895	10,745,693
Jan2001-Dec2001	9,908,407	10,181,830	10,198,235	10,069,858	10,067,729	10,067,729	10,058,647	10,049,039	10,048,793	10,076,953	10,076,471	
Jan2002-Dec2002	9,323,773	9,697,909	9,975,949	10,137,767	9,916,261	9,833,306	9,841,315	9,801,741	9,806,654	9,806,118		
Jan2003-Dec2003	10,088,449	10,230,479	10,569,209	10,474,506	10,490,309	10,439,396	10,433,603	10,433,544	10,433,026			
Jan2004-Dec2004	13,511,655	14,617,156	14,365,230	14,136,910	14,200,576	14,224,668	14,237,738	14,236,871				
Jan2005-Dec2005	18,504,020	20,519,193	20,424,976	20,438,771	20,421,589	20,441,751	20,453,619					
Jan2006-Dec2006	22,368,857	23,306,762	23,899,693	23,872,564	24,066,286	24,170,807						
Jan2007-Dec2007	24,406,942	24,810,939	24,769,240	24,540,524	24,494,362							
Jan2008-Dec2008	27,489,517	28,269,906	28,225,569	28,552,989								
Jan2009-Dec2009	34,032,274	34,537,427	34,187,211									
Jan2010-Dec2010	32,122,105	31,969,111										
Jan2011-Dec2011	30,779,673											

Accident Year Ending	24/12	36/24	48/36	60/48	72/60	84/72	96/84	108/96	120/108	132/120	144/132
Jan2000-Dec2000	1.047	1.030	1.004	1.010	1.041	0.987	1.000	1.000	0.982	1.000	0.999
Jan2001-Dec2001	1.028	1.002	0.987	1.000	1.000	0.999	0.999	1.000	1.003	1.000	
Jan2002-Dec2002	1.040	1.029	1.016	0.978	0.992	1.001	0.996	1.001	1.000		
Jan2003-Dec2003	1.014	1.033	0.991	1.002	0.995	0.999	1.000	1.000			
Jan2004-Dec2004	1.082	0.983	0.984	1.005	1.002	1.001	1.000				
Jan2005-Dec2005	1.109	0.995	1.001	0.999	1.001	1.001					
Jan2006-Dec2006	1.042	1.025	0.999	1.008	1.004						
Jan2007-Dec2007	1.017	0.998	0.991	0.998							
Jan2008-Dec2008	1.028	0.998	1.012								
Jan2009-Dec2009	1.015	0.990									
Jan2010-Dec2010	0.995										
Selected LDF	1.020	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000
To Ultimate	1.020	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000

**Exhibit II-E: Development of Loss Trend Factors**

Loss trend factors reflect the effects of inflation on past claim costs. Liberty Mutual uses an annual loss trend of +5.0% to trend losses from the average date of loss in the accident year to the average accident date in the latest experience period (7/1/2011). This trend is based upon a review of least squares fitted trend lines to the last five years of Liberty Mutual's Homeowners Fast Track loss data for Arkansas. A loss trend of +8.2% was used to project losses from the average accident date in the latest experience period to the average accident date of one year beyond the proposed effective date.

**Calculation of Loss Trend Factors**

Annual Loss Trend = +5.0%  
Final Day of Experience Period = 12/31/2011

Accident Year Ending	Avg Accident Date			
		4.0		
12/31/07	07/01/07	1.050	=	1.216
		3.0		
12/31/08	07/01/08	1.050	=	1.158
		2.0		
12/31/09	07/01/09	1.050	=	1.103
		1.0		
12/31/10	07/01/10	1.050	=	1.050
		0.0		
12/31/11	07/01/11	1.050	=	1.000

**Calculation of Loss Projection Factor**

1) Annual Loss Trend Based on Liberty Data	8.2%
2) Average Accident Date of Last Year of Experience Period	07/01/11
3) Effective Date for Proposed Rates	02/24/13
4) Average Accident Date Under Proposed Rates	02/24/14
5) Number of Months Between (2) And (4)	31.9
6) Loss Projection Factor	

$$\frac{(5)/12}{\{1\}} = 1.233$$

The Homeowners Fast Track data used in selecting the historical loss trends is provided on the following page.

## LIBERTY MUTUAL - HOMEOWNERS FAST TRACK TREND DATA

Liberty Mutual Arkansas Dwelling FormsArkansas  
LIBERTY MUTUAL  
Fast Track Trend DataDivision 9 - Southwest  
LIBERTY MUTUAL  
Fast Track Trend Data

Prior 4 Qtrs.		Dwelling (Forms 1-3 & 5)		
Ending		Paid	Paid	Paid Pure
Year	Qtr.	Severity	Freq.	Premium
2008	3	12,037	4.45	535.20
2008	4	10,828	4.65	503.41
2009	1	12,800	4.60	588.99
2009	2	12,827	4.91	629.91
2009	3	8,337	7.09	590.73
2009	4	8,381	8.34	698.82
2010	1	8,096	8.21	664.37
2010	2	8,909	7.85	699.38
2010	3	10,665	5.83	622.10
2010	4	10,790	4.59	495.30
2011	1	9,288	4.62	428.76
2011	2	7,862	4.61	362.40
2011	3	6,919	5.62	388.93
2011	4	9,161	5.45	499.31
2012	1	10,431	5.57	581.11
2012	2	11,680	5.58	652.10
2012	3	15,085	4.90	738.45

Prior 4 Qtrs.		Dwelling (Forms 1-3 & 5)		
Ending		Paid	Paid	Paid Pure
Year	Qtr.	Severity	Freq.	Premium
2008	3	7,942	3.56	282.82
2008	4	8,602	3.42	294.58
2009	1	9,016	3.37	303.59
2009	2	9,402	3.40	319.43
2009	3	9,558	3.72	355.89
2009	4	9,239	3.99	368.30
2010	1	9,149	4.09	373.78
2010	2	9,196	4.12	378.72
2010	3	9,222	3.92	361.86
2010	4	9,506	3.72	354.07
2011	1	9,659	3.57	345.22
2011	2	9,741	3.59	349.59
2011	3	10,542	3.61	380.68
2011	4	10,465	3.73	390.11
2012	1	10,456	3.81	397.86
2012	2	10,175	3.74	380.03
2012	3	10,310	3.93	404.80

2-Yr (5 pts)	105.57	-9.60	85.84
3-Yr (9 pts)	14.33	2.91	17.66
4-Yr (13 pts)	11.94	-14.14	-3.89
5-Yr (17 pts)	-1.02	-0.66	-1.67

2-Yr (5 pts)	-2.87	7.01	3.94
3-Yr (9 pts)	6.05	1.17	7.28
4-Yr (13 pts)	4.84	-1.73	3.03
5-Yr (17 pts)	5.42	1.76	7.27

Historical Severity Trend	5.0%
Historical Frequency Trend	0.0%
<b>Historical Pure Premium Trend</b>	<b>5.0%</b>
Projected Severity Trend	5.0%
Projected Frequency Trend	3.0%
<b>Projected Pure Premium Trend</b>	<b>8.2%</b>

**Exhibit II-F: Catastrophe Analysis**

Because of the low frequency and high severity nature of catastrophes, catastrophe losses could significantly impact the financial results of an insurer from one year to another. To properly reflect the catastrophe hazard, it is appropriate to eliminate actual catastrophe losses from the experience period and to include a catastrophe provision in the rates which represents expected catastrophic loss.

The projected loss costs below are all based on Arkansas' catastrophe loss experience.

**Provision for Non-Hurricane, Non-Severe Storm Catastrophes**

1) Annual AOI Trend	1.030
2) Average Earned Date of Last Year of Experience Period	7/1/2011
3) Effective Date for Proposed Rates	02/24/13
4) Average Earned Date Under Proposed Rates	02/24/14
5) Number of Years Between (2) And (4)	2.65
6) AOI Projection Factor = $(1)^{(5)}$	1.082
7) Calendar Year Ending 12/31/2011 Earned AOI (000s)	16,257
8) Projected Earned AOI = $(6) * (7)$	17,584
9) Expected Non-Hurricane Non-Severe Storm Cat Loss Per \$1000 AOI	0.073
10) Projected Expected Non-Hurricane Non-Severe Storm Cat Losses = $(8) * (9)$	1,285
11) Calendar Year Ending 12/31/2011 Earned Premium	179,984
12) Provision for Ex. Hurr, Ex. Sev. Storm Cat Losses = $(10) / (11)$	0.7%

\*The table below displays the supporting data for item 9, Liberty Mutual's loss costs per \$1000 Amount of Insurance. This loss cost is calculated from Liberty Mutual's historical losses due to catastrophes other than hurricanes and severe storms for Arkansas over the 17-year period ending 12/31/2011.

**Historical Catastrophe Losses per \$1000 AOI**  
**(Excluding Hurricanes and Severe Storms)**

**Liberty Mutual Group**  
**Arkansas**  
**Fire and Allied**  
**Historical Non-Modeled CAT Load**  
**Accident Years Ending December 1995 - 2011**

(1) Accident Year	(2) Non-Modeled CAT Incurred Loss	(3) AOI/1000	(4) Non-Modeled CAT Inc Loss / \$1000 AOI
Dec-95	0	4,054	0.000
Dec-96	0	4,768	0.000
Dec-97	0	5,883	0.000
Dec-98	0	7,235	0.000
Dec-99	0	7,942	0.000
Dec-00	0	7,569	0.000
Dec-01	0	8,028	0.000
Dec-02	0	9,296	0.000
Dec-03	0	10,422	0.000
Dec-04	0	13,203	0.000
Dec-05	0	17,574	0.000
Dec-06	0	18,684	0.000
Dec-07	0	17,320	0.000
Dec-08	14,375	16,722	0.860
Dec-09	0	15,506	0.000
Dec-10	0	16,237	0.000
Dec-11	0	16,257	0.000
Total	\$14,375	\$196,697	0.073

**Selected Non-Modeled CAT Inc Loss/\$1000 AOI**

**0.073**

**Liberty Mutual Group**  
**Arkansas**  
**Fire and Allied**  
**Severe Storm Load**  
**Accident Years Ending December 1995 - 2011**

(1) Accident Year	(2) Severe Storm Incurred Loss	(3) AOI/1000	(4) Severe Storm Inc Loss / \$1000 AOI
Dec-94	830	4,054	0.205
Dec-95	3,376	4,768	0.708
Dec-96	6,432	5,883	1.093
Dec-97	0	7,235	0.000
Dec-98	34,526	7,942	4.347
Dec-99	30,330	7,569	4.007
Dec-00	11,490	8,028	1.431
Dec-01	2,828	9,296	0.304
Dec-02	5,065	10,422	0.486
Dec-03	3,565	13,203	0.270
Dec-04	1,824	17,574	0.104
Dec-05	6,269	18,684	0.336
Dec-06	5,529	17,320	0.319
Dec-07	62,262	16,722	3.723
Dec-08	49,759	15,506	3.209
Dec-09	32,991	16,237	2.032
Dec-10	63,216	16,257	3.889
Total	\$320,291	\$196,697	1.628

Selected

1.628

**Provision for Severe Storm Loss**

1) Annual AOI Trend	1.030
2) Average Earned Date of Last Year of Experience Period	7/1/2011
3) Effective Date for Proposed Rates	02/24/13
4) Average Earned Date Under Proposed Rates	02/24/14
5) Number of Years Between (2) And (4)	2.65
6) AOI Projection Factor = (1)^(5)	1.082
7) Calendar Year Ending 12/31/2011 Earned AOI (000s)	16,257
8) Projected Earned AOI = (6) * (7)	17,584
9) Expected Severe Storm Loss Per \$1000 AOI	1.628
10) Projected Expected Severe Storm Losses = (8) * (9)	28,632
11) Calendar Year Ending 12/31/2011 Earned Premium	179,984
12) Provision for Severe Storm Losses = (10) / (11)	15.9%

**Exhibit II-G: Expense Data**

The table below summarizes Liberty Mutual's expense data for Arkansas based on Southwest regional data for Homeowner. The expense data below serves as the basis for all of the expense provisions in the rate-level indication.

**Liberty Mutual Group  
Fire and Allied  
Arkansas**

<b>Expense Provision - Regional Data</b>						
<b>Item</b>	<b>2009</b>	<b>2010</b>	<b>2011</b>	<b>Average</b>	<b>Planned 2012</b>	<b>Selected</b>
Expenses Based on Losses						<b>3 Yr. Avg.</b>
ALAE	\$3,624,026	\$4,322,878	\$5,688,311	\$4,545,072	\$4,272,231	\$4,545,072
ULAE	\$18,775,349	\$17,111,854	\$25,426,435	\$20,437,880	\$28,081,110	\$20,437,880
Incurred Loss	\$129,497,548	\$147,430,786	\$160,614,490	\$145,847,608	\$222,663,741	\$145,847,608
LAE / Loss	17.3%	14.5%	19.4%	17.1%	14.5%	17.1%
LAE / Earned Premium	11.0%	9.0%	11.5%	10.5%	10.1%	10.5%
Expenses Based on Earned Premium						<b>Planned</b>
General Expense	\$40,407,512	\$46,763,805	\$57,748,566	\$48,306,628	\$85,375,423	\$85,375,423
Earned Premium	\$203,528,232	\$237,910,702	\$270,290,374	\$237,243,103	\$321,758,282	\$321,758,282
Total General Ratio	19.9%	19.7%	21.4%	20.4%	26.5%	26.5%
Fixed General					19.7%	19.7%
Variable General					6.9%	6.9%
Expenses Based on Written Premium						
Premium Tax (State Specific, Latest Year)					3.2%	3.2%
Contingency					1.0%	1.0%
Profit					15.6%	15.6%
(General + LAE) / Earned Premium	30.9%	28.7%	32.9%	30.9%	36.6%	37.1%
Total Expense Ratio (excl. LAE)					46.4%	46.4%
Permissible Loss + LAE Ratio					53.6%	<b>53.6%</b>

Note: Plan LAE relies upon regional data, while Plan General Expense and Premium Tax rely upon state specific data.

### Exhibit II-H: Credibility Standard

For Dwelling Fire and Allied Lines, Liberty Mutual uses a full credibility standard of 80,000 earned house-years based on Homeowners data.

This standard is based upon the intent to have 99.5% confidence that the calculated value is within 5.0% of the true value of the statistic. According to Longley-Cook's 1962 PCAS paper, 3,163 claims are needed.

To translate this into an exposure standard, we reviewed our countrywide claim frequency figures excluding catastrophic claims for Dwelling Forms. For 2005-2009, they show:

2005	3.89 claims/100 house-years
2006	3.73 claims/100 house-years
2007	3.56 claims/100 house-years
2008	3.54 claims/100 house-years
2009	3.80 claims/100 house-years

5 year mean of frequencies:  
3.70 claims/100 house-years

Dividing the claims necessary for full credibility by the experience claim frequency produces the house-years full standard.

$$\frac{3,163}{0.037} = 85,377$$

For convenience sake, a full credibility standard of 80,000 house-years was used.

### III. Profit Provision

As the Liberty Mutual Group is organized under a mutual holding company system, our company has limited recourse to stock market capitalization to generate needed surplus funds, unlike a publicly-traded insurance company or an insurance company with a publicly-traded parent. Any increase in surplus must come from (1) underwriting profit, (2) investment income, (3) realized capital gains, or (4) unrealized capital gains. In the following analysis, Liberty Mutual selects provisions for underwriting profit which will ensure that anticipated income from all sources produces net income after taxes that is commensurate with the risk assumed in the business of property/casualty insurance. Furthermore, these provisions ensure that projected changes in policyholder surplus are sufficiently similar (in direction and magnitude) to changes in premium accounts so that confidence in the Companies' financial integrity can be maintained.

Exhibit A shows a history of calendar year rates of return for investment income expressed as a percentage of mean invested assets. The primary source is interest, dividends, and real estate income shown in column (3). Based on the current market yield, it is reasonable to anticipate before tax returns of 4.0% from interest, dividends, and real estate income during the time rates are effective. Historically, realized capital gains have contributed very little to earnings. For the prospective period, we select 0.2% from this source. In total, our anticipated pre-tax return is 4.2%. We believe this a reasonable return given the current interest rate environment. After federal income taxes, the total anticipated rate of return is 3.1% of invested assets.

Exhibit B presents the investment income derived from unearned premium reserves. The model uses historical information, modified for the current tax rate. This income is separated into two categories. First, there are premium finance charges [Line 10] collected by allowing policyholders to pay their premiums in installments over the 12-month policy term. Line 3 is the corresponding portion of the unearned premium reserve representing the premium which is being financed by the company. Second, there is the remaining reserve, after prepaid expense and taxes, [Line 7] which develops income based on the anticipated rate of return.

Exhibit C applies the rate of return to mean loss and loss adjustment expense reserves. These exhibits relate investment income to premium earned. Exhibit D provides pertinent expense data. Exhibit E deals with the calculation of federal income taxes applicable to unearned premium and loss reserves.

We have determined that, related to surplus, 15.0% is an appropriate and fair rate of return for property-casualty insurers in comparison with other industries, given the variability in the overall return. The profit provision of 15.6% is derived using an iterative method to yield the appropriate rate of return.

Income from all of the above sources is combined with our selected underwriting profit provisions in the following 1.25 to 1 premium-to-surplus model:

Let Premium = \$100; Surplus = \$80

	<u>Homeowne</u> <u>rs</u>
1) Investment Income on Unearned Premium Reserves \$100 x (Exhibit B, Table 1, Item 12)	\$0.96
2) Investment Income on Loss Reserves \$100 x (Exhibit C, Table 1, Item 5)	\$0.77
3) Investment Income on Surplus \$80 x (Exhibit A, Table 1, Column 7)	\$2.48
4) Underwriting Income After Tax \$100 x (1-.35) x Profit Provision (Exhibit D, Item 5 + Tax)	\$10.79
5) Total Expected Return [1]+[2]+[3]+[4]	\$15.00
6) Expected Return on Surplus [5]/Premium:Surplus Ratio x 100%	18.8%
7) GAAP Adjusted Return [6]/GAAP Adj. Factor (Exhibit F, Item 6)	15.0%

The end product is an anticipated return of 15.00% on earned premium, after tax. Related to surplus, these underwriting profit provisions develop an anticipated 15.0% GAAP adjusted rate of return.

**Exhibit III-A: Effective Rate of Return on Investable Assets**

Table 1: Historical Investments Returns 1986-2010

(1)	(2)	(3)	(4)	(5)	(6)	(7)
Calendar	Mean	Net	Net	Net Realized	Net	Total
<u>Year</u>	<u>Invested</u>	<u>Investment</u>	<u>Inv. Inc</u>	<u>Capital</u>	<u>Realized</u>	<u>Return</u>
	<u>Assets (a)</u>	<u>Income (b)</u>	<u>% of (2)</u>	<u>Gains (c)</u>	<u>Cap. Gains</u>	
					<u>% of (2)</u>	
1986	8,118,335,491	638,231,286	7.9	306,142,812	3.8	
1987	9,808,729,009	733,126,525	7.5	117,222,704	1.2	
1988	11,272,895,755	868,278,838	7.7	34,851,447	0.3	
1989	12,415,308,080	965,013,926	7.8	45,991,686	0.4	
1990	13,727,246,565	1,040,182,466	7.6	43,141,539	0.3	
1991	14,085,608,244	1,084,863,706	7.7	16,195,685	0.1	
1992	14,872,603,927	1,078,372,300	7.3	356,556,819	2.4	
1993	15,380,644,905	1,019,000,685	6.6	192,575,284	1.3	
1994	15,728,080,374	1,000,703,107	6.4	42,091,361	0.3	
1995	16,644,320,729	1,004,243,423	6.4	58,061,803	0.3	
1996	17,754,458,149	1,024,976,627	5.8	80,172,253	0.5	
1997	19,051,878,513	1,049,458,975	5.5	112,763,515	0.6	
1998	20,008,196,638	1,114,613,916	5.6	199,016,656	1.0	
1999	21,692,869,206	1,259,013,722	5.8	559,579,315	2.6	
2000	23,097,086,037	1,249,282,280	5.4	336,548,991	1.5	
2001	22,316,155,306	1,180,115,309	5.3	295,996,921	1.3	
2002	22,117,700,188	1,149,160,133	5.2	236,186,278	1.1	
2003	24,593,328,553	1,213,180,583	4.9	186,183,583	0.8	
2004	28,362,100,873	1,278,067,945	4.5	411,926,118	1.5	
2005	31,616,013,191	1,277,698,305	4.0	273,728,472	0.9	
2006	35,560,878,142	1,370,600,938	3.9	106,166,957	0.3	
2007	40,342,136,927	1,668,935,624	4.1	189,655,540	0.5	
2008	44,670,013,186	2,071,514,943	4.6	(48,560,181)	-0.1	
2009	47,693,589,467	1,792,955,767	3.8	(28,910,232)	-0.1	
2010	49,579,139,343	1,721,410,847	3.5	202,759,385	0.4	
Latest 10 Years	346,851,055,176	14,723,640,394	4.4	1,825,132,841	0.7	
Latest 5 Years	217,845,757,065	8,625,418,119	4.0	421,111,469	0.2	
Anticipated Returns (Before Tax)			4.0		0.2	4.2
2010 Federal Tax Rate (Exhibit A, Table 2)			0.2527		0.3500	
Anticipated Returns (After Tax)			3.0		0.1	3.1

(a) Mean of current and prior year Annual Statements: Page 2, Line 12 Less Page SI04, Column (2), Lines 12, 18 and 24.

(b) 2010 Annual Statement: Page 4, Line 9 less Page 12, Part 1, Column (2), Lines 1.3, 2.11, 2.21, and 8.

(c) 2010 Annual Statement: Page 4, Line 10.

Table 2: Effective Federal Tax Rate

	Earned <u>Income</u>	<u>Distribution</u>	Federal Tax <u>Rate</u>
BONDS (Ex Tax Exempt)	\$1,310,960,104 (a)	0.762	0.3500
BONDS (Tax Exempt)			
Acquired Before 8/7/86	\$1,758,989	0.001	0.0000
Acquired After 8/7/86	\$533,575,661	0.310	0.0525
STOCKS			
Acquired Before 8/7/86			
Non-Affiliated	\$495,262	0.000	0.1050
Foreign	<u>\$0</u>	0.000	0.3500
Total	\$495,262		
Acquired After 8/7/86			
Non-Affiliated	\$38,463,137	0.022	0.1418
Foreign	<u>\$1,982,397</u>	0.001	0.3500
Total	\$40,445,534		
All Other Investment Income (b)	(\$165,824,703) (c)	-0.096	0.3500
Net Investment Income Gain/(Loss)	\$1,721,410,847 (d)	1.000	0.2527

(a) 2010 Annual Statement: Page 12, Part 1, Column (2), Lines 1 + 1.2  
(Excludes bonds of affiliates)

(b) Reduced by investment expenses and depreciation on real estate

(c) 2010 Annual Statement: Page 12, Part 1, Column (2), lines 3, 4, 6, 7, and 9 less line 16

(d) Exhibit A, Table 1, Column 3

(e) Weighted average rate using "Distribution" column

**Exhibit III-B: Investment Income from Unearned Premium Reserves**Table 1: Investment Income from Unearned Premium Reserves as Factor of Earned Premium  
(Homeowner's Insurance)

1)	Earned Premium	\$100.00
2)	Mean Unearned Premium Reserve Ratio of Mean Direct Unearned Premium Reserve to Direct Earned Premium x [1]	52.8
3)	Mean Premium Subject to Installment Payment Finance Plan Ratio of Mean Premium Financed to Mean Direct Unearned Reserve x [2]	\$16.05
4)	Funds Available for Prepaid Expense, Tax, and Investment [2] - [3]	\$36.75
5)	Prepaid Expense Sum of Acquisition, Taxes, and One-Half General Expenses x (2)	\$13.83
6)	Federal Tax - 1986 Reform Act Ratio of Tax Payable to Mean Net Unearned Premium Reserve x [2]	\$0.26
7)	Funds Available for Investment [4] - [5] - [6]	\$22.66
8)	Rate of Return, After Tax	3.1%
9)	Income on Invested Reserve [7] x [8]	\$0.70
10)	Income from Installment Payment Premium Finance Plan Ratio of Investment Income to Mean Premium Financed x (3)	\$0.26
11)	Total Investment Income [9] + [10]	\$0.96
12)	Investment Income as a Factor of Earned Premium [11] / [1]	0.0096

Notes

Lines [2], [3], and [10]: Exhibit B, Table 2, Columns [9], [10] and [6], 'Selected'

Line [5]: Exhibit D - Acquisition, 50% of General, and Taxes

Line [6]: Exhibit E, Section A, Line [5]

Line [8]: Exhibit A, Table 1

Table 2: Investment Income from Installment Payment Premium Finance Plan (\$000)  
(Homeowner's Insurance)

<u>Year</u>	[1] Premium Finance Charges	[2] Premium Charged-Off	[3]=[1]-[2] Net Investment Income	
2001	\$5,398	\$449	\$4,949	
2002	\$6,970	\$790	\$6,180	
2003	\$8,919	\$726	\$8,193	
2004	\$9,778	\$1,040	\$8,738	
2005	\$11,506	\$2,111	\$9,396	
2006	\$12,392	\$2,334	\$10,059	
2007	\$14,137	\$3,573	\$10,564	
2008	\$13,395	\$4,317	\$9,078	
2009	\$12,066	\$4,655	\$7,411	
2010	\$10,922	\$4,070	\$6,852	
<u>Year</u>	[4]=[3]*0.65 After-Tax Investment Income	[5] Mean Premium Financed	[6]=[4]/[5] Ratio of Investment Income to Mean Premium Financed	
2001	\$3,217	\$67,910	0.047	
2002	\$4,017	\$82,183	0.049	
2003	\$5,326	\$108,101	0.049	
2004	\$5,680	\$138,091	0.041	
2005	\$6,107	\$180,942	0.034	
2006	\$6,538	\$228,417	0.029	
2007	\$6,867	\$268,226	0.026	
2008	\$5,901	\$293,077	0.020	
2009	\$4,817	\$313,837	0.015	
2010	\$4,454	\$336,197	0.013	
Selected			0.016	
<u>Year</u>	[7] Direct Earned Premium	[8] Mean Direct Unearned Premium Reserve	[9]=[8]/[7] Unearned Premium to Earned Premium Ratio	[10]=[5]/[8] Premium Financed to Earned Premium Ratio
2001	\$585,606	\$335,806	0.573	0.202
2002	\$605,146	\$326,325	0.539	0.252
2003	\$785,092	\$389,129	0.496	0.278
2004	\$1,215,035	\$560,232	0.461	0.246
2005	\$1,372,622	\$732,281	0.533	0.247
2006	\$1,519,257	\$813,361	0.535	0.281
2007	\$1,699,204	\$899,324	0.529	0.298
2008	\$1,825,083	\$957,790	0.525	0.306
2009	\$1,935,763	\$1,028,410	0.531	0.305
2010	\$2,120,662	\$1,118,697	0.528	0.301
Selected			0.528	0.304

**Exhibit III-C: Investment Income from Loss Reserves**

Table 1: Investment Income from Loss Reserves as a Factor of Premium

1)	Ratio of Loss & LAE Reserves to Incurred Loss & LAE	0.477
2)	Ratio of Federal Tax Payable to Incurred Loss & LAE	0.002
3)	Permissible Loss & LAE Ratio	0.525
4)	Net Effective Rate of Return After Tax	0.031
5)	Investment Income as a Factor of Premium $\{(1) - (2)\} * (3) * (4)$	0.008

Notes

Line [1]: Exhibit C, Table 2, Column [9]

Line [2]: Exhibit E, Section B, Line [11]

Line [3]: Exhibit D

Line [4]: Exhibit A, Table 1

Table 2: Ratio of Loss and LAE Reserves to Loss and LAE Incurred

	[1]	[2]	[3]
	Year-End Net	Prior Year Net	Mean Net
<u>Year</u>	<u>Loss Reserve</u>	<u>Loss Reserve</u>	<u>Loss Reserve</u>
2001	147,845	183,292	165,569
2002	176,393	147,845	162,119
2003	201,479	176,393	188,936
2004	367,575	201,479	284,527
2005	568,616	367,575	468,095
2006	498,140	568,616	533,378
2007	446,319	498,140	472,230
2008	560,636	446,319	503,478
2009	475,877	560,636	518,257
2010	571,906	475,877	523,891

  

	[4]	[5]	[6]
	Year End Net	Prior Year Net	Mean Net
<u>Year</u>	<u>LAE Reserve</u>	<u>LAE Reserve</u>	<u>LAE Reserve</u>
2001	33,451	49,226	41,338
2002	31,405	33,451	32,428
2003	36,122	31,405	33,763
2004	82,857	36,122	59,490
2005	115,338	82,857	99,098
2006	110,387	115,338	112,863
2007	106,062	110,387	108,225
2008	107,054	106,062	106,558
2009	116,129	107,054	111,591
2010	121,935	116,129	119,032

  

	[7]	[8]	[9]
	Net	Net	Ratio of
<u>Year</u>	<u>Incurred</u>	<u>Incurred</u>	<u>Reserves</u>
	<u>Losses</u>	<u>LAE</u>	<u>to Incurred</u>
2001	454,057	66,314	0.398
2002	384,098	64,543	0.434
2003	467,271	86,178	0.402
2004	790,683	155,126	0.364
2005	1,080,477	181,149	0.450
2006	779,062	141,784	0.702
2007	757,842	136,861	0.649
2008	1,209,511	161,740	0.445
2009	1,011,135	174,545	0.531
2010	1,232,504	177,916	0.456

Selected

0.477

**Exhibit III-D: Expense Ratios for Homeowners' Insurance**

1) Acquisition	21.3%
2) General	4.4%
3) Taxes	2.7%
4) Reinsurance	2.4%
5) Profit	15.6%
6) Contingency	1.0%
7) Total	47.5%
8) Permissible Loss and LAE Ratio	52.5%

Notes

Data from 2010 Insurance Expense Exhibit (Direct)

**Exhibit III-E: Federal Income Tax Payable Due to Tax Reform Act of 1986****A. Tax on Unearned Premium Reserves (\$000)**

	<u>Homeowners</u>
1) Net Unearned Premium Reserve 12/31/09	\$1,080,414
2) Net Unearned Premium Reserve 12/31/10	\$1,156,981
3) Mean Net Unearned Premium Reserve {[1] + [2]} / 2	\$1,118,697
4) Federal Tax Payable on Change in Net Unearned Premium Reserve {[2]-[1]} x 20% x 0.35	\$5,360
5) Ratio of Tax Payable to Mean Net Unearned Premium Reserve [4] / [3]	0.005

**B. Loss & LAE Reserve Discounting (\$000,000)**

	<u>Homeowners</u>	
1) Net Reserve at 12/31/09	\$592.01	(a)
2) Net Reserve at 12/31/10	\$693.84	(a)
3) Discounted Net Reserve at 12/31/09	\$558.22	(b)
4) Discounted Net Reserve at 12/31/10	\$651.80	(b)
5) Change in Net Reserve [2]-[1]	\$101.84	
6) Change in Discounted Net Reserve [4]-[3]	\$93.59	
7) Additional Taxable Income [5]-[6]	\$8.25	
8) Federal Tax Payable [7] x 0.35	\$2.89	
9) 2010 Incurred Loss & LAE (Insurance Expense Exhibit)	\$1,410.42	(c)
10) Ratio of Federal Tax Payable to Incurred Loss & LAE [8] / [9]	0.002	
11) Selected	0.002	

(a) Insurance Expense Exhibit, Part II, Columns 13 + 15 + 17

(b) Discount ratios are provided internally by the Financial Department

(c) Insurance Expense Exhibit, Part II, Columns 7, 9 and 11 divided by 1,000.

**Exhibit III-F: Expected Total Return - Adjustment to GAAP**

<b>Expected Total Return - Adjustment to GAAP</b>		Amounts in Millions		
Item	2008	2009	2010	Source
(1) Policyholders Surplus	12,330	14,704	16,038	Annual Statement: Page 3, Column (1), line 35
(2) Non-Admitted Assets	2,518	1,138	1,119	Annual Statement: Page 2, Column (2), line 26
(3) Equity in the UPR [= (h) calculated below]	2,285	2,333	2,441	calculated field
(4) Total Adjustments (2)+(3)	4,803	3,471	3,560	calculated field
(5) GAAP Surplus Adjustment Factor [(4)+(1)]/(1)	1.390	1.236	1.222	calculated field
(6) Selected GAAP Surplus Adjustment Factor		1.250		

**Calculation of Equity in UPR**

Item	2008	2009	2010	Source
(a) Commissions and Brokerage Expense Incl	2,462	2,415	2,473	IEE: Page 7, Part 3, Column (23), Totals
(b) Taxes, License & Fees	776	710	777	IEE: Page 7, Part 3, Column (25), Totals
(c) Other Acquisition Expenses Incl	2,268	2,079	2,111	IEE: Page 7, Part 3, Column (27), Totals
(d) General Expense Incl	1,633	1,864	1,803	IEE: Page 7, Part 3, Column (29), Totals
(e) Total of (a) + (b) + (c) + 0.5(d)	6,323	6,136	6,263	calculated field
(f) Written Premium	26,329	24,773	25,318	IEE: Page 6, Part 3, Column (1), Totals
(g) Ending UPR	9,516	9,418	9,868	IEE: Page 6, Part 3, Column (19), Totals
(h) Equity in UPR (g)*(e)/(f)	2,285	2,333	2,441	calculated field



**Liberty Mutual Group**  
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Boston, MA 02116  
Telephone: (617) 357-9500

VIA SERFF

November 29, 2012

Honorable Jay Bradford  
Arkansas Insurance Department  
Property & Casualty Division  
1200 W 3<sup>rd</sup> Street  
Little Rock, AR 72201-1904

RE: **Premium Deviation Revision**  
**Dwelling Fire Policy Program**  
**Company Tracking No. AR DF SR 02 13**  
**Liberty Mutual Fire Insurance Company 111-23035**

Dear Commissioner Bradford:

In accordance with the “file and use” provision, Liberty Mutual Fire Insurance Company is revising its Dwelling Fire Rating Manual. Revisions are applicable to all new business policies produced on or after **February 24, 2013** and all renewal policies effective on or after **April 17, 2013**.

**Summary of Changes**  
**DWELLING FORMS (DP-1, DP-2, DP-3)**

**1. Revise the current dwelling policy loss cost multiplier from 2.065 to 2.272 for both dwelling and contents. This factor applies to following coverages when applicable:**

Fire building	VMM building
Fire other structure	VMM other structure
Fire contents	VMM contents
Extended, Broad & Special buildings	Broad Form theft
Extended, Broad & Special other structures	Limited Form theft
Extended & Broad contents	Personal liability

The current and proposed deviation factors are detailed below:

**Current Factors**

	<b>Coverage A</b>	<b>Coverage B</b>	<b>Coverage C</b>
Fire	2.065	2.065	2.065
Extended	2.065	2.065	2.065
Special	2.065	2.065	--
Broad	2.065	2.065	2.065
Vandalism	2.065	2.065	2.065

**Proposed Factors**

	<b>Coverage A</b>	<b>Coverage B</b>	<b>Coverage C</b>
Fire	2.272	2.272	2.272
Extended	2.272	2.272	2.272
Special	2.272	2.272	--
Broad	2.272	2.272	2.272
Vandalism	2.272	2.272	2.272

**Rating Manual Changes**

Arkansas LM-1

**Rate Effect**

There is a 10.0% rate increase associated with this revision

**Filing Information**

Applicable filing information and revised manual pages have been uploaded in SERFF. If you have any questions, please do not hesitate to contact me at (617) 357-9500 x42878 or by email at [Zachary.Binkley@LibertyMutual.com](mailto:Zachary.Binkley@LibertyMutual.com)

Sincerely,

Zachary Binkley  
Associate II, Product  
Personal Markets, Liberty Mutual