

# US Regulatory Landscape for P&C Actuaries: Don't Roll the Dice

CAS Annual Meeting  
Las Vegas, Nevada  
November 12, 2018



---

---

---

---

---

---

---

---

## Antitrust Notice

The Casualty Actuarial Society is committed to adhering strictly to the letter and spirit of the antitrust laws. Seminars conducted under the auspices of the CAS are designed solely to provide a forum for the expression of various points of view on topics described in the programs or agendas for such meetings.

Under no circumstances shall CAS seminars be used as a means for competing companies or firms to reach any understanding—expressed or implied—that restricts competition or in any way impairs the ability of members to exercise independent business judgment regarding matters affecting competition.

It is the responsibility of all seminar participants to be aware of antitrust regulations, to prevent any written or verbal discussions that appear to violate these laws, and to adhere in every respect to the CAS antitrust compliance policy.



---

---

---

---

---

---

---

---

## Panelists

- Lisa G. Chanzit, FCAS, MAAA, ARM, Senior Consulting Actuary, Risk & Regulatory Consulting, LLC (moderator)
- Mary T. Hosford, FCAS, MAAA, CPCU, AIM, AIAF, Chief Health Actuary, Massachusetts Division of Insurance
- Gennady Stolyarov II, FSA, ACAS, MAAA, CPCU, ARe, ARC, API, AIS, AIE, AIAF, Lead Actuary, Property and Casualty Section, Nevada Division of Insurance, State of Nevada Department of Business & Industry
- Kevin M. Dyke, FCAS, MAAA, Chief Actuary, Michigan Department of Insurance and Financial Services
- Julie Ann Lederer, FCAS, MAAA, Property & Casualty Actuary, Missouri Department of Insurance



---

---

---

---

---

---

---

---

## “Top of Mind” Regulatory Topics

- Risk-focused exams
- ORSA
- Health and P&C
- Big Data/Predictive Modeling
- Qualification Attestation
- 2018 Statement of Actuarial Opinion




---

---

---

---

---

---

---

---

---

---

## RECENT DEVELOPMENTS IN RISK-FOCUSED EXAMS & ORSA IMPLEMENTATION

LISA G. CHANZIT, FCAS, MAAA, ARM  
RISK & REGULATORY CONSULTING, LLC




---

---

---

---

---

---

---

---

---

---

## Risk-focused examinations

### Pre-2010 Process

- Details
- Checklists
- Symptoms
- Reporting Findings
- Transaction Testing
- Task-Oriented
- Static Reviews
- Current Issues
- No consideration of risk mitigation
- Minimal interaction with examiner

### Current Process

- Big Picture/Top Down
- Priorities (Risk-Focused)
- Causes
- Make Recommendations
- Process/Control Review
- Results-Oriented
- Ongoing Monitoring
- Emerging/**Prospective** Issues
- Consider risk mitigation strategies
- Continual interaction with examiner




---

---

---

---

---

---

---

---

---

---

### Enhancement... Critical Risk Category (CRC) Framework

1. Asset valuation
2. Liquidity considerations
3. Investment strategy
4. Adequacy of reinsurance
5. Reinsurance reporting/collectability
6. Underwriting and pricing strategy/quality
7. Reserve data
8. Reserve adequacy
9. Related party/holding company considerations
10. Capital management



©Risk & Regulatory Consulting  
LLC - Not to be Duplicated  
Without Prior Consent

---

---

---

---

---

---

---

---

---

---

### Risk-focused exams: Polling question #1

In addition to loss reserves and associated data, in how many CRC's can P&C actuaries potentially add value?

- A. 2
- B. 4
- C. 5
- D. 6
- E. All 8
- F. Other



8

---

---

---

---

---

---

---

---

---

---

### Critical Risk Category Framework

1. Asset valuation
2. Liquidity considerations
3. Investment strategy
4. Adequacy of reinsurance
5. Reinsurance reporting/collectability
6. Underwriting and pricing strategy/quality
7. Reserve data
8. Reserve adequacy
9. Related party/holding company considerations
10. Capital management



©Risk & Regulatory Consulting  
LLC - Not to be Duplicated  
Without Prior Consent

---

---

---

---

---

---

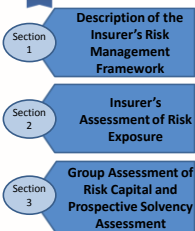
---

---

---

---

## Overview of ORSA



- ORSA provides a management view of risks and capital, which helps to "challenge" what is covered under traditional approaches to reserves and capital
- ORSA aggregates risks across all the activities of the insurance company to enable a comparison of required capital to available capital
- ORSA is not solely a quantitative representation of the risks but also requires a systematic identification, assessment and management of the risks
- A thorough evaluation of risk requires that an insurance company not only evaluate its current exposure to risk but also its future potential risk, in light of strategic objectives
- ORSA plays a key role in the communication between an insurance company and regulators



©Risk & Regulatory Consulting LLC - Not to be Duplicated Without Prior Consent

10

---

---

---

---

---

---

---

---

---

---

## NAIC Branded Risk Categories



11

©Risk & Regulatory Consulting LLC - Not to be Duplicated Without Prior Consent

---

---

---

---

---

---

---

---

---

---

## ORSA Implementation: Polling Question #2

How are regulators generally using ORSA?

1. Understand the company's risk profile and ERM
2. Leverage risk assessment for risk-focused exam procedures
3. Compare ERM among companies to support risk evaluation
4. Determine companies in hazardous financial condition
5. 1. through 4. only
6. Use to understand and approve transactions
7. Use to assess value of existing regulations and modify?
8. All of the above



12

---

---

---

---

---

---

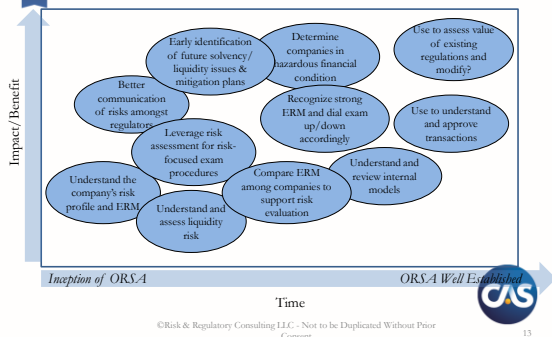
---

---

---

---

## Potential Short and Long Term Uses of ORSA




---

---

---

---

---

---

---

---

---

---

## A Word on Form F (Enterprise Risk Report)

- Purposes are similar
- Form F guidance is developing.
- Form F ideally contains info to allow lead State reviewing ORSA to assess impact of holding company
- May not be as much detail in Form F depending on approach taken by non-insurance holding company.
- NAIC's new ORSA guidance suggests Form F review relating to entities in scope of Executive Summary section.



©Risk & Regulatory Consulting LLC - Not to be Duplicated Without Prior Consent

14

---

---

---

---

---

---

---

---

---

---

**MASSACHUSETTS INSURANCE REGULATORY UPDATE**

November 12, 2018  
Mary Hosford, FCAS, MAAA

---

---

---

---

---

---

---

---

---

---

### Topics

- Current P&C Issues - Massachusetts
- NAIC P&C Actuaries Discussion Group Issues
- Health Insurance (from a P&C Perspective)

---

---

---

---

---

---

---

---

### Current P&C Issues – Massachusetts

- Columbia Gas Explosions
- Dog Incidents
- FAIR Plan
- Pyrrhotite
- Travel Insurance
- Weather

---

---

---

---

---

---

---

---

### NAIC P&C Actuaries Discussion Group Issues

- Credit Scoring
- Truck Platooning/Smart Technology
- Impact of Tariffs on Rates
- How to accept 3<sup>rd</sup> party statistical models
- Rate increase transition factors

---

---

---

---

---

---

---

---

### Health Insurance from the P&C Perspective

- Similarities/Differences
- Massachusetts Health Insurance Issues
- NAIC Health Actuaries Discussion Group Issues

---

---

---

---

---

---

---

---

### Health Insurance vs P&C:

- Rate Development
- Terminology
- Constituents
- Federal Oversight
- Minimum Loss Ratios/Rebates

---

---

---

---

---

---

---

---

### Current Health Issues – Massachusetts

- Behavioral Health
- Mental Health Parity
- Longterm Care rates
- Erosion of ACA
- Narcan

---

---

---

---

---

---

---

---

## NAIC Health Actuaries Discussion Group Issues

- Experience Rating for Large Group Health Insurance
- Underpricing Medicare Supplement
- Medicare Supplement Benefit/Rate Alignment

---

---

---

---

---

---

---

---

State of Nevada  
Department of Business & Industry

Protect Consumers  
Ensure Solvency

**Division of Insurance**

### Developments in Regulatory Review of Predictive Models

**Gennady Stolyarov II, FSA, ACAS, MAAA, CPCU, ARe, ARC, API, AIS, AIE, AIAF**  
**Lead Actuary, Property and Casualty Insurance**  
 Nevada Division of Insurance  
**Contact:** [gstolyarov@doi.nv.gov](mailto:gstolyarov@doi.nv.gov)

*Presentation for the  
 Casualty Actuarial Society (CAS) Annual Meeting  
 Discussion Panel on U.S. Regulatory Landscape for P&C Actuaries  
 November 12, 2018*




---

---

---

---

---

---

---

---

State of Nevada  
Department of Business & Industry

Protect Consumers  
Ensure Solvency

**Division of Insurance**

### NAIC Paper on Regulatory Review of Complex Predictive Models

- **“Best practices”** for review of complex predictive models
- **Guidance:** Neither binding nor exhaustive
- **State-specific requirements** may supplement or supersede.
- Currently focused on **GLMs for personal automobile and home insurance.**

#### Key Regulatory Principles

1. State insurance regulators will maintain their current rate regulatory authority.
2. State insurance regulators will be able to share information to aid companies in getting insurance products to market more quickly.
3. State insurance regulators will share expertise and discuss technical issues regarding complex predictive models.
4. State insurance regulators will maintain confidentiality where appropriate regarding complex predictive models.




---

---

---

---

---

---

---

---



### NAIC Paper on Regulatory Review of Complex Predictive Models – Areas of Consideration

- I. **Selecting Model Input**
  - ❖ Available Data Sources, Sub-Models, Adjustments and Scrubbing, Data Organization
- II. **Building the Model and Scrutinizing the Data**
  - ❖ Narratives (High- and Medium-Level) for Building the Model
  - ❖ Predictor Variables, Massaging Data, Model Validation, Goodness-of-Fit Measures
  - ❖ "Old Model" versus "New Model"
  - ❖ Modeler/Software
- III. **The Filed Rating Plan**
  - ❖ General Impact of Model on Rating Algorithm
  - ❖ ★ Relevance of Variables / Relationship to Risk of Loss
  - ❖ Comparison of Model Outputs to Current and Selected Factors
  - ❖ Responses to Data, Credibility, and Granularity Issues
  - ❖ Definitions of Rating Variables
  - ❖ Supporting Data
  - ❖ ★★ Consumer Impacts
  - ❖ Accurate Translation of Model into a Rating Plan



---

---

---

---

---

---

---

---

---

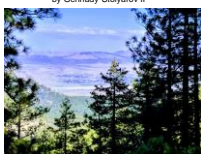
---

### Emerging Issues on Predictive Models in Nevada

- **Transitions from Older to Newer Generations of Credit-Based Insurance Scoring (CBIS) Models:**  
More rate disruption than expected or reasonable
- **Stand-Alone Models Considering Utility / Telecommunication Information (NCTUE Data):**  
Models proposed to be adopted alongside credit-based insurance scoring models, instead of information incorporated into CBIS models
- **Decision Trees / Gradient-Boosting Models:**  
Selection of number of trees, "stumps", order of variables, characterization of overall impact.
  - Missing the forest for the trees?



Angular Fractal Tree (2010) by Gennady Stolyarov II



View of Carson City from the Kings Canyon Trail – July 8, 2018 – Gennady Stolyarov II →

---

---

---

---

---

---

---

---

---

---

### Revisiting the NAIC's P/C Qualified Actuary Definition

Kevin M. Dyke, FCAS, MAAA  
Chief Actuary, Michigan Department of Insurance and Financial Services

Casualty Actuarial Society  
Annual Meeting 2018



---

---

---

---

---

---

---

---

---

---

### Qualified Actuary Definition: How Did We Get Here?

- **2011:** Regulators express general concerns about actuarial qualifications
- **2012:** Introduction of general insurance track for SOA
- **2012-15:** Various NAIC subgroups evaluate definition of qualified actuary
- **2015:** CASTF recommends independent study of SOA/CAS tracks




---

---

---

---

---

---

---

---

### Actuarial Credential/ Qualification Study

- Project overseen by an ad-hoc committee of the NAIC Executive Committee (not CASTF)
- Contracted with WorkCred in two areas:
  - Phase 1: Evaluation of current actuarial credentials (Credential Review)
  - Phase 2: Identify knowledge and skills to perform P&C reserve evaluations, perform (Job Analysis Project)




---

---

---

---

---

---

---

---

### Actuarial Credential/ Qualification Study

- Credential Review
  - CAS
    - FCAS was sufficient, but ACAS may need to add reserve topics from Exam 7
  - SOA
    - FSA General Insurance track was NOT sufficient, as it “lacked necessary breadth and depth”
- Job Analysis Review
  - Produced a list of 103 knowledge statements
  - Identified the “breadth” of knowledge needed by the Appointed Actuary




---

---

---

---

---

---

---

---

### Actuarial Credential/ Qualification Study

- Report suggested more study is needed in three areas:
  - Definition of Qualified Actuary, specifically Educational Standards
  - Detailed requirements for three year experience period
  - Recertification of actuaries (Continued Competence)
- New definition would be coupled with a new requirement for the actuary to attest to compliance with the qualification requirements




---

---

---

---

---

---

---

---

### Proposed Changes to P/C Appointed Actuary Requirements




---

---

---

---

---

---

---

---

### Qualified Actuary Definition

- Initial definition in December 2017 added requirement to perform tasks and knowledges
  - Meets the Qualifications Standards for Specific Actuarial Opinions,
  - Can perform tasks, and through basic education, obtain the knowledges in the Job Analysis, AND
  - Member of the American Academy of Actuaries
- Removed current requirement to be a member of the CAS
- Key concerns:
  - Use of 103 Knowledge Statements in the definition
  - No reference to the CAS or SOA in the definition
  - Original proposed attestation forms required appointed actuary to attest to having acquired knowledge in all 103 Knowledge Statements




---

---

---

---

---

---

---

---

### Qualified Actuary Definition

- Current definition (October 2018):
  - Meets the Qualifications Standards for Specific Actuarial Opinions,
  - Has obtained a designation approved by the NAIC meeting or exceeding minimum P/C actuarial education standards
  - Has sufficient experience and knowledge of company's business and activities, AND
  - Member of the professional organization subject to the Code, Qual Standards, and ABCD




---

---

---

---

---

---

---

---

### Annual Attestation

- CASTF charged to develop an attestation an actuary must complete and sign annually to verify the actuary is qualified to sign a statutory P/C Statement of Actuarial Opinion
- Current proposal
  - Actuary to submit "qualification documentation" annually to management and include in the actuarial report
  - Must address all items in the Qualified Actuary definition
- Original proposal included actuary's attestation of the 103 Knowledges associated with each actuarial opinion




---

---

---

---

---

---

---

---

### Three Year Experience Requirement

- CASTF charged to work with the American Academy of Actuaries to add clarity to the required three-year experience period in the *U.S. Qualification Standards* regarding the mentor's responsibilities and the learning expectations for the actuary
- Considerations/concerns
  - No details in Qualifications Standards about how an actuary is to obtain or document the three years of experience
  - Other professional organizations have clear requirements to demonstrate and record experience




---

---

---

---

---

---

---

---

### Three Year Experience Requirement

- Current proposal:
  - Actuarial opinion instructions: “The qualification documentation should include specific actuarial experiences relevant to the company’s structure and lines of business.”
- Comments have been received and will be considered at upcoming NAIC national meeting




---

---

---

---

---

---

---

---

### Continued Competence

- CASTF charged to work with actuarial organizations to require P/C Appointed Actuaries participate in a continued competence process every one to three years
- CAS and SOA created a joint task force to develop a proposal
- Current proposal
  - Require appointed actuary to attest (with CAS/SOA) to having met the continuing education (CE) requirements contained in the Specific Qualification Standards
  - CAS/SOA will publicly disclose actuaries who have attested to meeting the CE requirements
  - Annual report to NAIC to illustrate that appointed actuaries, as a body, are meeting CE requirements




---

---

---

---

---

---

---

---

### Standards and Assessments Project

- Provides “depth” of knowledge required to be an Appointed Actuary
- Assessment of syllabi and examination content of the P/C actuarial educational programs
- Develop an Educational standard with each Knowledge statement
- Currently underway with CAS, SOA, and AAA




---

---

---

---

---

---

---

---

# U.S. Regulatory Landscape for P&C Actuaries: Don't Roll the Dice

NAIC Statement of Actuarial Opinion Instructions: Changes for Year-End 2018

November 12, 2018  
Julie Lederer



---

---

---

---

---

---

---

---

The 2018 Instructions define a new term.

### Accident & Health (A&H) Long Duration Contracts:

"A&H Contracts in which the contract term is greater than or equal to 13 months and contract reserves are required...Two specific examples of contracts that typically require contract reserves are long-term care and disability income insurance."\*

A&H Long Duration Contracts are distinct from the P&C Long Duration Contracts whose unearned premium reserves are reported on Exhibit A, Items 7 and 8.  
A&H Long Duration Contracts are also distinct from short-duration A&H coverages like accidental death.

\*Paragraph 1A, Actuarial Opinion section of NAIC 2018 Property/Casualty Annual Statement Instructions



---

---

---

---

---

---

---

---

There are three main motivations for the changes to the Instructions.

1. A desire by regulators to gain a greater understanding of property and casualty insurers' exposure to A&H Long Duration Contracts
2. The adoption of Actuarial Guideline 51 in August 2017. AG 51\*:
  - A. Requires stand-alone asset adequacy analysis of long-term care (LTC) business
  - B. Applies to companies with over 10,000 inforce lives covered by LTC insurance contracts as of the valuation date
  - C. Was adopted by the NAIC's Executive Committee and Plenary in August 2017
  - D. Took effect on December 31, 2017
3. Recent adverse reserve development in LTC business

\*"Actuarial Guideline LI—The Application of Asset Adequacy Testing to Long-Term Care Insurance Reserves," NAIC Accounting Practices and Procedures Manual, March 2018



---

---

---

---

---

---

---

---

The 2018 Instructions separate A&H and P&C Long Duration Contracts.

- 1. New term: "A&H Long Duration Contracts"\*
- 2. "Long Duration Contracts" from the 2017 Instructions renamed "P&C Long Duration Contracts" to distinguish between these contracts and "A&H Long Duration Contracts"\*

There were no changes to the opinion requirements in 2018 regarding P&C Long Duration Contracts.

\*Paragraph 1A, Actuarial Opinion section of NAIC 2018 *Property/Casualty Annual Statement Instructions*




---

---

---

---

---

---

---

---

---

---

The appointed actuary is asked to disclose A&H Long Duration Contract reserves.

- 3. New item on Exhibit B: DISCLOSURES\*:
13. The net reserves for the A&H Long Duration Contracts that the Company carries on the following lines on the Liabilities, Surplus and Other Funds page:
- |  |          |
|--|----------|
| 13.1 Losses  | \$ _____ |
| 13.2 Loss Adjustment Expenses  | \$ _____ |
| 13.3 Unearned Premium  | \$ _____ |
| 13.4 Write-In (list separately, adding additional lines as needed, and identify (e.g., "Premium Deficiency Reserves", "Contract Reserves other than Premium Deficiency Reserves" or "AG 51 Reserves")) | \$ _____ |

\*Exhibit B: DISCLOSURES, Actuarial Opinion section of NAIC 2018 *Property/Casualty Annual Statement Instructions*




---

---

---

---

---

---

---

---

---

---

There are A&H-related disclosure and documentation requirements.

- 4. "The Actuarial Report should contain disclosure of all reserve amounts associated with A&H Long Duration Contracts reported by the Company; the reserve amounts in the Actuarial Report should tie to the Annual Statement."\*
- 5. For insurers subject to AG 51, the "Actuarial Report and workpapers summarizing the results, assumptions and testing procedures for the asset adequacy testing of LTC business must be in compliance with AG 51 requirements."\*

\*Paragraph 7, Actuarial Opinion section of NAIC 2018 *Property/Casualty Annual Statement Instructions*




---

---

---

---

---

---

---

---

---

---

For more information

- NAIC 2018 *Property/Casualty Annual Statement Instructions*  
[www.naic.org](http://www.naic.org) → Products → Publications (by Category)
- "Regulatory Guidance on Property and Casualty Statutory Statements of Actuarial Opinion, Actuarial Opinion Summaries, and Actuarial Reports for the Year 2018"  
[www.naic.org](http://www.naic.org) → Committees → expand Property and Casualty Insurance (C) Committee → Actuarial Opinion (C) Working Group → Related Documents tab

---

---

---

---

---

---

---

---



---

---

---

---

---

---

---

---