8. (2.5 points)

An actuary is pricing a one-year commercial general liability occurrence policy. The following information is available:

- Renewal effective date is January 1, 2014

- Losses are evaluated as of September 1, 2013

Effective Date of Policy	Company Subject Loss Costs
January 1, 2013	$35,700
January 1, 2012	50,300
January 1, 2011	40,300
January 1, 2010	32,600
January 1, 2009	22,500

| | Paid & Outstanding | |
Date of Loss	Loss Amounts	ALAE
July 21, 2013	$2,000	$0
September 7, 2012	10,000	0
April 1, 2011	100,000	20,000
November 13, 2010	40,000	0
February 14, 2010	70,000	0
May 5, 2009	12,000	0

Given that the experience modification is equal to 0.443, calculate the adjustment to reflect the ultimate level of loss.

QUESTION 8

TOTAL POINT VALUE: 2.5   **LEARNING OBJECTIVE: B3**

SAMPLE ANSWERS

Sample 1

CSLC = 50,300 + 40,300 + 32,600 = 123,200 (PYs 2010 – 2012)

Using the ISO Manual Provided:
  Z = 0.30
  EER = 0.853
  MSL = 102,850

0.443 = 0.3 * [(AER – 0.853) / 0.853]
      AER = 2.1126

Actual Includable Loss + ALAE Capped @ BL & MSL = 10k + 102.85k + 40k + 70k = 222.85k
(only from losses between 1/1/2010 – 12/31/2012; the 4/1/2011 loss must be limited by the MSL)

2.1126 = (222,850 + ARULL) / 123,200
      ARULL = $37,422

Sample 2

CSLC = 50,300 + 40,300 + 32,600 = 123,200

Using the ISO Manual Provided:
  Z = 0.30
  EER = 0.853
  MSL = 102,850

Loss + ALAE Capped @ BL & MSL = 10k + 102.85k + 40k + 70k = 222.85k

AER = [(BL Loss + ALAE limited by MSL + ARULL) / CSLC]

Mod = [(AER – EER) / EER] * z
     = {[(222,850*LDF / 123,200) – 0.853] / 0.853} * 0.3 = 0.443
LDF = 1.168

EXAM 8 FALL 2014 SAMPLE ANSWERS AND EXAMINER'S REPORT

EXAMINER'S REPORT

To receive full credit on this question, candidates were expected to be familiar with the ISO GL Experience Rating Plan (which was also provided during the examination). The question specifically asked for the ARULL, a component of the AER, and expected candidates would be able to taken the given information and correctly calculate this value.

Full credit was given if the candidate expressed the ARULL as a dollar amount or a factor which would be applied to the actual loss limited by the basic limit and MSL. Also, if the candidate calculated the correct adjustment and then attempted to express this as a factor of the (CSLC * EER), no points were deducted.

Candidates generally performed well on this question, with a large majority receiving full credit. Common errors which prevented a candidate from receiving full credit included:

- Using the incorrect experience period (PYs 2010 – 2012) in the CSLC and Loss + ALAE calculations
- Incorrectly using the ISO manual to determine the appropriate Z, EER, and MSL values
- Failure to limit the 4/1/2011 Loss + ALAE by the MSL of $102,850
- Use of incorrect formulas for the modification and AER, or other calculation errors

Note that if candidates calculated one value incorrectly, but applied it correctly in determining the ARULL (e.g., looking up the Z, EER, and MSL correctly using an incorrect CSLC amount), only one deduction was taken.

Candidates appeared to have difficulty applying a couple concepts. It appeared some candidates were unfamiliar with what the question was asking for and attempted to incorrectly calculate an adjustment that would be applied to the given experience modification. Also, detrending is used in the calculation of the Company Subject Loss Costs (given in the problem), so candidates who attempted to apply detrend factors were not awarded full credit.