Celtic Insurance Company
Actuarial Memorandum
Commonwealth of Kentucky

1. **General Information**
   a) **Company Identifying Information**
      A. Company Legal Name: Celtic Insurance Company
      B. State: Kentucky
      C. HIOS issuer ID: 92164
      D. Market: Individual Major Medical
      E. Effective Date: January 1, 2016
   b) **Company Contact Information**
      A. Contact Name: Mark Freeman
      B. Contact Telephone Number: 312-619-3054
      C. Contact Email Address: MFreeman@celtic-net.com
   c) **Scope and Purpose –** This filing is a rate submission for the Celtic ACA-compliant individual major medical policy introduced to the Kentucky market in 2014. I have prepared this actuarial memorandum on behalf of Celtic Insurance Company to demonstrate compliance with the applicable laws of Kentucky and applicable requirements of the Affordable Care Act (ACA). This actuarial memorandum is not intended for any other purpose.
   d) **Product ID** – 92164KY001
   e) **Brief Description of the Benefits –** This policy provides major medical benefits. There is one plan design, which is at the prescribed Bronze plan tier, based on a 60.7% Actuarial Value as determined using the Actuarial Value (AV) Calculator. The plan design is unchanged from 2015.
   f) **Marketing Method** – This product will be sold through various marketing channels including brokers, telesales representatives, and through an online web portal. This product will not be offered on the exchange.

2. **Proposed Rate Increase**
   a) **Reasons for Rate Increase –** Rates are updated to be applicable to calendar year 2016. The rate change includes adjustments to reflect:
      - Updated market experience, including adjustments for pent-up demand
      - Underlying medical trend, including trend leveraging from the plan design
      - Changes in the contributions to and receipts from the transitional federal reinsurance program, and
      - Changes to ACA-related fees and taxes, including the Health Insurer fee.

   b) **Brief Description of How Proposed Rates were Determined** – Celtic does not have credible experience for non-grandfathered or ACA individual policies in 2014. Consequently, rates for this product were developed from a manual rate established from the nationwide experience contained in the 2012 Truven Health Analytics MarketScan Commercial database (MarketScan)[1].

[1] The MarketScan Commercial Claims and Encounters Database consists of employer- and health plan-sourced data containing medical and drug data for several million individuals annually, encompassing employees, their spouses, and dependents who are covered by employer-sponsored private health insurance.

Experience under the manual rates was adjusted to be reflective of anticipated Kentucky specific experience, and projected forward to account for medical inflation and morbidity differences expected in the rating period. Additional adjustments made to adjust to a 2016 expected allowed claim cost include adjustments for changes in provider discounts, benefit level changes, EHB covered services, and demographics. Paid claims were calculated as projected allowed claims multiplied by the estimated paid-to-allowed ratio for the proposed 2016 plan design. Finally, after making adjustments to reflect the impact of transitional reinsurance and risk transfer payments, the adjusted paid claims were converted to a premium base rate by adding the expected costs for ACA related fees/taxes, administrative expenses, and a load for profit/risk margin. Rates were developed under the assumption that they would remain in effect for new sales for twelve months after the proposed effective date of 1/1/2016. The average annual premium per member is projected to be $5,479. Please see Exhibit A for the proposed monthly rates by age and tobacco use. Premiums are developed for family coverage by adding up the rate of each covered family member, with no more than the three oldest covered children under age 21 being taken into account in computing the premium.

c) **Rating Factors** – Rating factors for age, tobacco use and geographic differences were retained unchanged from the current rates. Below is a description of the development of the age and tobacco use rate adjustments. Please see Exhibit B for the specific rating factor relativities being proposed.
   - A. Age Factors – The age curve being applied in the proposed rates is based on the 3:1 age curve prescribed by HHS. The standard curve was fitted such that the resulting average rate when weighted by the projected membership was equal to the calculated average premium PMPM after applying the factors noted above to the index rate.
   - B. Tobacco Use – A factor of 1.30 is being applied for those members who utilize tobacco. This factor is retained from prior filings and had originally been developed based on Celtic's historical experience which demonstrates that tobacco users relative to non–tobacco users have approximately 30% higher claims after normalizing for age differences within the population. It is being assumed that approximately 11% of total enrolled adults will be tobacco users.
   - C. Geographic Factors – Premiums will vary by the 8 defined geographic rating areas. The geographic relativities were retained from the 2015 filing, and were originally developed from Marketscan 2010 data. Relativities were developed such that the rating factors do not reflect expected morbidity differences. Average expected geographic claims costs PMPM from the data were adjusted for the risk adjustment factors for the membership underlying the experience in each geography.

3. **Experience Period Claims and Membership**

a) **Paid Through Date –** The date through which claims from the experience period of January 1, 2014 to December 31, 2014 were paid was January 31, 2015.

b) **Premiums (net of MLR Rebate) in Experience Period**
   - A. Prior to MLR Rebates: $0

B. MLR Rebates: $0. There were no enrollees in these plans in the experience period.

c) **Allowed and Incurred Claims Incurred During the Experience Period**

A. Allowed Claims
   1. Processed through claim system $0
   2. Estimate of incurred but not paid claims – $0
B. Incurred Claims
   1. Processed through claim system –$0
   2. Estimate of incurred but not paid claims – $0
C. Allowed claims were pulled directly from Celtic's claim records.
D. No IBNR is assumed as there were no enrollees in these plans in the experience period.

4. **Benefit Categories –** Not applicable as there were no claims in these plans in the experience period. Generally, Celtic places medical claims from the experience period into appropriate service categories using available categorical data. Inpatient claims were first bucketed using the Place of Service provided with each claim. Next, since the data were provided with the payment code (revenue, procedure, or HCPCS), remaining claims with an attached revenue code were mapped to the outpatient category. Finally, the professional and other categories were developed by mapping individual procedure/HCPCS codes. The other category contains claims from a multitude of more specific service types; including Acupuncture, Ambulance, DME, Hearing, Home Health, Medical Supplies and Vision services. Pharmaceutical claims were provided separately and were placed entirely in the prescription drug category.

5. **Projection Factors**

Given zero Celtic 2014 base period enrolment, final rates were determined using a manual rate approach only.

a) **Changes in the Morbidity of the Population Insured** – Given that there was no experience, no change in morbidity was projected.

b) **Changes in Benefits** – No adjustment was made for changes in benefits, as there was no experience.

b) **Changes in Demographics –** Given that there was no experience, no change in demographics was projected.

c) **Other Adjustments** – No other adjustments were applied, as there was no experience.

d) Trend – No trend projection was applied, given that there was no experience.

6. **Credibility Manual Rate Development**

a) **Source and Appropriateness of Experience Data Used –** Marketscan nationwide experience from 2012 was used as the basis for the manual rates which were developed. The experience was considered appropriate for use in the manual rate as it represents a fully credible dataset (based on over 300 million member months of experience), with the majority of the experience from non-underwritten coverages (consistent with the ACA individual market).

b) **Adjustments Made to the Data –** The following adjustments were made to the nationwide Marketscan experience to reflect appropriate Celtic-specific cost and utilization levels for Kentucky:

A. **Changes in the Morbidity of the Insured Population**– Consistent with prior Celtic filings, we developed an estimate for the morbidity adjustment relative to the large group market using the SOA estimate for changes in the morbidity of the individual market[2], coupled with data from the recent Medical Loss Ratio reports. We estimate that the morbidity of the ACA individual market in 2016 will be 1.033 of the base experience for the manual rate.

Additionally, a morbidity adjustment of 1.020 is included to adjust for Marketscan differences between the observed nationwide morbidity, and the morbidity of Kentucky.

The factor, as developed, included demographic adjustments. To estimate the true morbidity adjustment, the impact of the expected shift in the average mix by age and gender, equal to -0.2%, was removed from the adjustment so that it could be included with the demographic changes in the “Other” adjustment column of Worksheet 1, Section II.

After removing demographic change impacts, an adjustment equal to 1.055 was applied to the underlying Kentucky experience period allowed claims PMPM for population morbidity, reflecting the combination of each of the components described above.

Compared to prior filings we no longer project excess pent-up demand; reflecting that 2016 represents the third year of availability of guarantee-issue individual products.

B. **Changes in benefits** - We assume that many of the EHB benefits mandated for coverage for Kentucky are already included in the underlying Marketscan experience which is based primarily on large group coverage. Consequently, the only adjustment we include for EHB benefits in the manual rate relates to the inclusion of pediatric dental benefits. We estimate the impact of these benefits at 1.5%. This amount is consistent with the allowance included for these services in the 2015 filing, and had been developed based on information available in industry studies.

[2] Cost of the Future Newly Insured under the Affordable Care Act (ACA). March 2013. Society of Actuaries. http://cdn-files.soa.org/web/research-cost-aca-report.pdf

In addition, a utilization adjustment factor equal to 0.909 was applied to the nationwide experience to reflect the expected impact on utilization of the difference in cost sharing between the estimated experience period AV of 0.834 for the large group market and the projected actuarial value of 60.7% for the rating period plan design.

The utilization adjustment factor was developed consistent with the following table of induced demand factors which were released on pages 90–91 of the HHS Notice of Benefit and Payment Parameters for 2014.

Metal Level	Induced Demand Adjustment
Catastrophic	1.00
Bronze	1.00
Silver	1.03
Gold	1.08
Platinum	1.15

C. **Changes in Demographics –** An adjustment of approximately -0.2% was applied to reflect the shift between the average mix of the underlying Marketscan population by age and gender and the average mix anticipated to underlie the projection period. To calculate this adjustment, the distribution of membership by age and gender was first developed from the Marketscan experience. Expected claim costs were then applied to the distribution to develop a weighted average expected claim cost. Next, expected claims costs were applied to the anticipated distribution of membership by age and gender. The distribution is based on the 2011 US Census[3], excluding individuals covered by government health plans, reflecting that we continue to expect the individual market to ultimately look more similar to the overall population as medical underwriting will no longer apply. The calculated expected claim costs for the rating period were then compared to expected claims cost for the experience period to calculated the adjustment of -0.2% mentioned above.

In addition, a geographic adjustment of 0.930 was applied to reflect the impact of differences in geographic claim costs between Kentucky and Nationwide enrollment. Expected geographic claim cost relativities by MSA were developed based on MarketScan claims data, with the average allowed claim costs PMPM adjusted to smooth out the impact of any large claims greater than $150K and to normalize for any risk score differences. As a result, the adjusted average claim costs PMPM

[3] U.S. Census Bureau, Current Population Survey, 2012 Annual Social and Economic Supplement.

which were calculated reflect differences by state in provider practice and payment patterns and average network discounts. The nationwide PMPM was compared to the expected claim cost for Kentucky with the ratio between these two values applied as the geographic adjustment to the nationwide claims cost.

D. **Provider Discount Change** – An adjustment was applied to the projected costs in the manual rate to reflect a shift from the discount levels underlying the Marketscan experience in calendar year 2012 to the projected level of provider discounts projected to exist for Celtic in 2016. The 2016 product is an indemnity product. Claims were adjusted, as necessary, to reflect the expected allowed costs that would have been incurred under the 2016 product with the absence of a network, assuming payments based on usual and customary charges.The adjusted claims for the manual experience period were compared to the unadjusted claims to develop the final adjustment to be applied. We include an adjustment of 1.227 to adjust for this difference in provider pricing.

E. **Trend** – A trend rate used to project claims from the experience period to the rating period was developed based on a review of the Oliver Wyman Carrier Trend Report – January 2015. Given the limited enrolment in Celtic's individual book of business, it was assumed that industry level studies such as this would be most reliable for developing trend estimates.

   The Oliver Wyman Carrier Trend Report – January 2015 edition presents the pricing trends used by participating carriers in the development of their rates for January 2015. A total of 3.96 million members with individual health policies are represented by the 41 carriers with individual PPO business who participated in this edition of the report. In total, the weighted average reported medical trend being used for Individual PPO products among participating carriers was 6.98%, down from 7.6% in 2014. Separately, 15 participating carriers representing 37,000 members with individual indemnity products reported an 8.6% median and 9.2% weighted average trend for indemnity products. For prescription drugs, a larger sample of 76 issuers representing over 65 million members, reported a weighted prescription drug trend of 10.2%, significantly increased from 8.7% for 2014.

   Celtic is including an annual trend rate of 7.0% when projecting base period experience. The trend rates are applied from the midpoint of 2012, i.e. 7/1/2012, to the assumed midpoint of the rating period, 7/1/2016, for a total of 48 months. The overall trend adjustment being applied to the manual rate experience is 1.311.

c) **Inclusion of Capitation Payments** – Capitation payments were not considered, given that no capitation payments were made during the experience period nor are any expected to be made during the projected rating period.

7. **Credibility of Experience**
   a) **Description of the Credibility Methodology Used –** Celtic did not review its threshold for considering experience to be fully credible, assumed to be at approximately 310,000 member months, or approximately 25,800 members. This threshold was originally determined through the use of Limited Fluctuation Credibility Theory. Using this approach, a claim probability distribution model was first developed based on industry level claim distributions. This claim probability distribution model was then adjusted to reflect the overall Celtic allowed claim cost level from the experience period. Based on the adjusted claim probability distribution and the application of Limited Fluctuation Credibility Theory, it was determined that 310,000 member months of experience would be an appropriate credibility threshold such that the underlying experience would represent expected claims levels within +/–5%, 90% of the time. To determine the credibility of state specific experience when full credibility did not exist, the following formula was applied: (Actual Member Months / 310,000) ^ 0.5. This methodology is consistent with generally accepted actuarial practices used in the industry. Where experience was less than 5% credible, experience was assigned no credibility.

   b) **Resulting Credibility Level Assigned to Base Period Experience** – Based on the described methodology, the resulting credibility assigned to the Celtic experience in Kentucky was 0%.

8. **Paid To Allowed Ratio** – The projected Paid to Allowed ratio was developed by running the proposed Bronze plan design through Oliver Wyman's proprietary pricing model, which was adjusted to reflect the projected level of allowed claims per person per year for Celtic's 2016 Kentucky enrollees. This analysis resulted in a projected Paid to Allowed ratio for the specified plan design of 63.8%.

   We note that one of the reasons for the significant difference between the calculated AV of 60.7% based on the AV calculator and projected Paid to Allowed ratio of Kentucky is the result of the significant difference between the underlying assumed allowed costs per person per year being utilized between the two models. In the AV calculator, the average allowed cost per person per year is less than $5,000, whereas the projected average allowed claim cost per person per year for Celtic's projected Kentucky enrollees in 2016 is over $7,000. Due to the impact of leveraging, as claim costs increase, the level of claims over the fixed deductible associated with the proposed plan design becomes greater, and the Paid to Allowed ratio increases significantly.

9. **Risk Adjustment and Reinsurance**
   a) **Experience Period Risk Adjustment and Reinsurance Adjustment PMPM**
   Celtic did not have enrollment in the ACA individual market in the state. Therefore, no reinsurance and risk adjustment amounts are projected.

b) **Projected Risk Adjustments Payments –** A risk transfer recovery equal to $1.20 PMPM is being projected. This 2016 risk transfer payment was calculated using the formula outlined in the HHS Notice of Benefit and Payment Parameters. The following table provides the assumptions which were applied in this calculation.

Risk Transfer Formula Assumptions and Calculation

Kentucky

		Market	Celtic
AV	Actuarial Value Factor	0.700	0.600
RS	Risk Score	1.156	0.996
RF	Rating Factor	1.355	1.355
IDF	Induced Demand Factor	1.030	1.000
GCF	Geographic Cost Factor	1.000	1.000
P	Average Premium	$247.19	
	RS * IDF * GCF	1.190	0.996
N1	Normalized (RS * IDF * GCF)		0.837
	AV * RF * IDF * GCF	0.977	0.813
N2	Normalized (AV * RF * IDF * GCF)		0.832
	Transfer = P x (N1-N2)		$1.20

In developing the proposed rates, it is being assumed that the morbidity and geographic distribution of Celtic's 2016 population will look similar to the individual market average overall. Given limited Celtic experience and the uncertainty of the single risk pool population in 2016, we believe this is a reasonable assumption to make. As a result of this assumption, the same factors are assumed for the Rating Factor and Geographic Cost Factor between the statewide calculation and Celtic calculation.

In addition, it is being assumed that the average statewide plan sold will be equivalent to the Silver metal tier. As a result, the statewide AV being assumed is 0.7 and the statewide IDF being assumed is 1.03. (These assumptions are broadly consistent with the results from the most recent ASPE report on market enrollment[4]). For Celtic, the AV was set equal to the 0.6 AV for the Bronze metal tier with the IDF assumed to be 1.0. The risk scores in the table above were calculated based on the MarketScan population for Kentucky. The Statewide factor reflects the risk score for this population based on a Silver metal tier while the risk score for Celtic was calculated based on a Bronze metal tier. Finally, the statewide average premium was assumed to be 10% above the second lowest cost silver rates in 2015 on the Exchange for a 21-year old in the rating area with the most populous county, increased by the rating factors above.

[4] Available at http://aspe.hhs.gov/health/reports/2015/marketplaceenrollment/jan2015/ib_2015jan_enrollment.pdf

Separately, the risk adjustment amounts include a $0.15 PMPM allowance for the risk adjustment user fee.

Given that one plan design is being proposed, Celtic complies with the requirement that risk adjustment transfers are allocated proportionally to plan premiums across the single risk pool.

c) **Projected ACA Reinsurance Recoveries Net of Reinsurance Premium** – A projected net reinsurance recovery equal to $25.96 PMPM is being assumed in the development of the proposed rates. This adjustment is made at the market level. This assumption was developed by first scaling a representative claim probability distribution to reflect Celtic's 2016 expected allowed claim levels. Using the scaled claim probability distribution, estimated annual payments were then calculated based on Celtic's proposed Bronze plan design. Next, the estimated annual payments per member per year between the thresholds of $90,000 and $250,000 were accumulated and multiplied by 50%, consistent with federal regulation regarding the transitional reinsurance program. This amount was then divided by twelve to convert it to a PMPM basis. Lastly, the temporary reinsurance assessment of $2.25 PMPM, which is being levied across all individuals for 2016, was subtracted, resulting in a projected net reinsurance recovery of $25.96 PMPM.

10. **Non-Benefit Expenses and Profit & Risk–** Expense assumptions were developed based on a combination of a review of historical expense levels as well as prospective adjustments to reflect future expectations. Below are the assumptions being applied in the proposed rates:
    a) Administrative Expense Load: 15.0%.
    b) Profit or Contribution to Surplus & Risk Margin: 5%. This amount is consistent with the level assumed in 2015 pricing.
    c) Taxes and Fees
        A. Premium Tax: 1.50%
        B. Exchange User Fee: 0.0%
        C. ACA Insurer Tax: 2.75%
        D. Comparative Effectiveness Research Fee: $0.18 PMPM

11. **Projected Loss Ratio**
    a) **Projected Federal MLR –** The ACA minimum loss ratio (MLR) requirement for individual policies is 80.0%. The ACA permits adjustments to the MLR for quality improvement initiatives and specified fees/taxes. After applying the allowed ACA adjustments, the projected federal MLR for this policy is 80.5%. Below is a demonstration of this calculation:

MLR Calculation

Calculated Paid Claims PMPM	$372.79
+ Risk Transfer Payment/Receipt	-$1.20
+ Reinsurance Payment/Receipt	-$28.21
+ QI Expense	$0.00
Total Adjusted Medical Expense	**$343.39**
Calculated Overall Rate PMPM	$456.62
- CER Fee	$0.18
- Risk Adjustment Fee	$0.15
- Reinsurance Fee	$2.25
- ACA Insurer Fee	$8.16
- State Premium Tax	$6.85
- Federal Taxes	$12.39
Total Adjusted Premium	**$426.65**
Calculated Federal MLR	**80.5%**

b) **Projected Loss Ratio** – The projected loss ratio for 2016, based on dividing projected incurred claims by earned premium, excluding expected net reinsurance recoveries and risk transfer payments, is equal to 81.6%. If net reinsurance recoveries and risk transfer payments are subtracted from claims, the projected loss ratio prior to federally allowed adjustments is 75.7%.

12. **Application of Market Reform Rating Rules**

a) **Single Risk Pool –** The single risk pool for Celtic for the individual market in Kentucky was established according to the requirements of 45 CFR part 156, at 156.80(d). Claims experience in the experience period includes all non-grandfathered individual business written in Kentucky. Projected 2016 enrollment includes only enrollment in fully ACA-compliant plans.

b) **Index Rate –** The index rate for the experience period has been set equal to the allowed claims cost PMPM in the market. The index rate for the projection period is $584.37 PMPM. The index rate is set to represent the allowed claims PMPM for the proposed bronze plan design, for essential health benefits only, and has not been adjusted for payments and charges under the risk adjustment and reinsurance programs, or for Exchange user fees.

c) **Market Adjusted Index Rate –** The market adjusted index rate of $542.03 PMPM is equal to the Index Rate previously described adjusted for the impact of the temporary federal reinsurance program and the risk adjustment program (as described in Section 9 of this memorandum, expressed as a % of projected paid claims). No Exchange user fees were applicable.

Derivation of the Market Adjusted Index Rate

①	Index Rate	$584.37
②	Reinsurance Impact	-7.0%
③	Risk Adjustment Impact	-0.3%
④	Exchange User Fee	0.0%
⑤	Market Adjusted Index Rate =① x (1+②) x (1+ ③) x (1+④)	$542.03

d) **Plan Adjusted Index Rate –** Since only a single plan is offered, and no non-EHB benefits are included, the Plan Adjusted Index Rate of $443.35 PMPM is calculated directly from the market adjusted index rate as shown in the table below.

Derivation of the Plan Adjusted Index Rate

①	Market Adjusted Index Rate	$542.03
②	Cost Sharing Adjustment	63.8%
③	Provider Network	0.0%
④	Benefits in addition to EHB	0.0%
⑤	Retention Adjustment	75.7%
⑥	Tobacco Surcharge	3.0%
⑦	Plan Adjusted Index Rate =(① x ② x (1+ ③) x (1+④))/(⑤ x (1+⑥))	$443.35

e) **Calibration**

I. Age Calibration: As stated before, the anticipated distribution of membership by age and gender was developed based on the 2011 US Census[5], excluding individuals covered by government health plans, reflecting that we are expecting the individual market to look more similar to the overall population now that medical underwriting will no longer be applied. Under this distribution, the average age of covered individuals is approximately 34. Using the same distribution, and the federal standard age curve, a weighted average age factor of 1.355 was calculated, consistent with age 43 on the standard age curve. It is not expected that these values would be identical, as the standard age curve is not a linear function across the ages.

II. Geographic Factor calibration: The geographic calibration factor is based on the weighted average geographic rating factor, using the proposed geographic factors, and the projected enrollment by rating area. Geographic relativities were retained from the 2015 filing, with factors calibrated such that this weighted average geographic factor is equal to 1.0 across the 8 rating areas of Kentucky.

[5] U.S. Census Bureau, Current Population Survey, 2012 Annual Social and Economic Supplement.

f) **Consumer Adjusted Premium Rate Development –** The table below shows the crosswalk from the Plan Adjusted Index Rate to the Consumer Adjusted Premium Rate for a single non-smoker age 46 in Kentucky.

Derivation of the Consumer Adjusted Premium Rate

①	Plan Adjusted Index Rate	$443.35
②	Calibration: Average Age	34
③	Calibration: Age Factor	1.355
④	Calibration: Geography	1.000
⑤	Base Rate =①/(③ x ④)	$327.11
⑥	Age 46 Age Factor	1.500
⑦	Geographic Factor: Rating Area 3	0.901
⑧	Consumer Adjusted Rate =⑤ x ⑥ x ⑦	$442.08

13. **AV Metal Values –** The AV Metal Value included in Worksheet 2 of the Part I Unified Rate Review Template was entirely based on the AV Calculator.

14. **AV Pricing Values –** The AV Pricing value for the product proposed is the aggregate of all the adjustments to derive the Plan Adjusted index rate from the Market Adjusted index rate, i.e. $443.35/ $542.03=0.818.

15. **Membership Projections –** Celtic will be offering only a single plan in the Kentucky market in 2016. We therefore project all membership in this plan. We assume for the purposes of completing Worksheet 2 of the Part I Unified Rate Review Template that projected membership in 2016 will be equal to 120 member months.

16. **Terminated Plans and Products –** No products were terminated between the experience period and the effective date of this filing.

17. **Plan Type –** The plan type selected in the drop-down box in Worksheet 2, Section I is representative of the proposed plan included with this filing.

18. **Warning Alerts –**
There is an error in Worksheet 2 for Plan Adjusted Index Rate (Line 54). This is a consequence of there being no experience in the experience period.

There is a warning in Worksheet 2 for Plan Adjusted Index Rate. (Line 80) The apparent discrepancy is the result of comparing a rate with no calibration for tobacco loading (single risk pool average premium) with a rate that has already been calibrated for the average tobacco load.

Similarly, a warning is included for Total Premium in Worksheet 2 (Line 82) because the premium revenue expected from tobacco loadings have been excluded from the plan-level values, while it is included in the comparative value from worksheet 1.

19. **Data Reliance**
In preparing this filing, I have relied on company data (including claims, premium, company financials) provided by staff members at Celtic. In addition, I have relied on information provided by staff members of Celtic for estimates regarding retrospective and prospective discount off billed charges levels as well as completion factors to apply to paid claims. I have reviewed the data for reasonableness; however, I have not audited the data in detail.

20. **Actuarial Certification –** I am a Fellow of the Society of Actuaries and a Member of the American Academy of Actuaries, and I meet the Academy's qualifications standards for preparing health rate filings and, to the best of my knowledge and belief, I certify the following:

- This filing was developed in compliance with the applicable Actuarial Standards of Practice and conforms to generally accepted actuarial principals.
- This filing is in compliance with the applicable laws and regulations of Kentucky and all applicable federal statutes and regulations.
- The projected index rate is
    - I. In compliance with all applicable state and Federal statutes and regulations (45 CFR § 156.80(d)(1))
    - II. Developed in compliance with the applicable Actuarial Standards of Practice
    - III. Reasonable in relation to the benefits provided and the population anticipated to be covered
    - IV. Neither excessive nor deficient

- The Index rate and only the allowable modifiers as described in 45 CFR 156.80(d)(1) and 45 CFR 156.80(d)(2)) are used in the development of plan specific premium rates.
- The percent of total premium that represents essential health benefits included in Worksheet 2, Sections III and IV was calculated in accordance with actuarial standards of practice.
- The geographic rating factors reflect only differences in the costs of delivery (which can include unit cost and provider practice pattern differences) and do not include differences for population morbidity by geographic area.

- The AV Calculator, with no further adjustments, was used to determine the AV Metal Value for the proposed plan design.

Kurt Giesa, FSA, MAAA
Oliver Wyman Actuarial Consulting, Inc.
April 1, 2015