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October 5, 2016

Kevin Fry, Chair  
NAIC Investment Risk Based Capital Working Group  
National Association of Insurance Commissioners  
Via email: Julie Garber, NAIC staff support, [JGarber@NAIC.org](mailto:JGarber@NAIC.org).

RE: Response to the “Proposal for Life Bond Granularity and Related Issues”

Dear Mr. Fry:

On behalf of the C1 Work Group (C1WG) of the American Academy of Actuaries,<sup>1</sup> we appreciate the opportunity to provide the following comments to the National Association of Insurance Commissioners (NAIC)’s Investment Risk Based Capital Working Group’s (IRBC) on the “Proposal for Life Bond Granularity and Related Issues” dated Sept. 6, 2016.

- In general, we support the efforts of the IRBC to revise the investment risk charges in the Life RBC formula. Further, we support increasing the granularity of the C1 bond factors.

As noted in our 2015 report, in our modeling of the factors for corporate bonds, we analyzed the full range of bond ratings, including the numerical modifiers. As such, we modeled 19 factors to potentially replace the existing five factors. We did not model those bonds falling in the NAIC 6 category. Note that the factor for bonds reported as an NAIC 6 bond are in or near default, and the C-1 factor is set equal to the base factor for unaffiliated common stock (i.e., 30 percent). There are three rating classes mapped to NAIC 6.

The C1WG originally recommended 14 factors (13 to replace the NAIC 1-5 factors plus one for NAIC 6).<sup>2</sup> These base factors were direct model output and were not rounded. While we originally recommended a compressed set of factors, that recommendation was largely based on the logical numerical breakpoints and earlier IRBC guidance to limit investment grade factors to six to accommodate state investment laws. Regardless, our modeling produced the full set of 19 factors. These 19 factors are statistically credible, and the full set could be used as a replacement for the current set of five factors.

Expanding to 19 factors (plus the one for bonds at/near default) provides the greatest

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<sup>1</sup> The American Academy of Actuaries is an 18,500+ member professional association whose mission is to serve the public and the U.S. actuarial profession. For more than 50 years, the Academy has assisted public policymakers on all levels by providing leadership, objective expertise, and actuarial advice on risk and financial security issues. The Academy also sets qualification, practice, and professionalism standards for actuaries in the United States.

<sup>2</sup> “Model Construction and Development of RBC Factors for Fixed Income Securities for the NAIC’s Life Risk-Based Capital Formula: A report prepared by the American Academy of Actuaries C1 Work Group” Aug. 15, 2015.

flexibility for future updates and has recently been endorsed by Moody's.<sup>3</sup>

- We support the RBC-only approach to implementation. We understand that the changes to the RBC calculation in LR002 do not support the ability to audit the securities in each of the 20 rating classes. Instead, the LR002 changes retain the ability to audit the amounts used to calculate the C-1 requirement for the same six designations used in the current calculation. We note that regulators continue to retain the ability to audit an individual insurer's filing, if necessary. While the ideal approach would include the ability to audit the values reported in each of the 20 ratings, we are comfortable with the level of auditability included in the exposure.
- We strongly suggest that the base factors and the adjustments for portfolio size and issuer concentration be modified at the same time. The purpose of these adjustments is to ensure the targeted statistical safety level for the C-1 component of the Life RBC formula is achieved. Regulators have prescribed the statistical safety level for the factors for individual bond securities at the 92<sup>nd</sup> percentile over 10 years and at the 96<sup>th</sup> percentile over 10 years for the entire C-1 component.

The C1WG is updating the basis for the portfolio adjustments consistent with the base factors and satisfying the targeted statistical safety level. The C1WG will be making a recommendation to the IRBC in the near future. Our initial analysis suggests that there may be a more precise way to capture differences between an individual insurer's portfolio and the representative portfolio reflected in the base factors than using only the number of issuers within a portfolio.

Our ongoing analysis is based on the number of issuers within the bond portfolio and introduces a new factor based on the variation of issuer size within the portfolio. The final analysis is expected to demonstrate how our proposed portfolio adjustment better captures variations in portfolio credit risk by insurance company. If the IRBC supports this type of portfolio adjustment, changes to the RBC Instructions will be required for implementation. The changes to the RBC Instructions for the contemplated portfolio adjustments would go beyond those contained in the version exposed by the IRBC currently being discussed. Additionally, our analysis is expected to support the retention of the adjustment for the 10 largest holdings.

We appreciate the efforts of the working group to address the issues related to the proposed C1 Bond Factors. If you have any questions or would like to discuss further, please contact Nancy Bennett ([bennett@actuary.org](mailto:bennett@actuary.org)), Senior Life Fellow, or Amanda Darlington, Life Policy Analyst ([darlington@actuary.org](mailto:darlington@actuary.org)).

Sincerely,

Nancy Bennett, MAAA, FSA, CERA  
Jerry Holman, MAAA, FSA, CFA  
Chairpersons, C1 Work Group  
American Academy of Actuaries

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<sup>3</sup> US Insurer Risk-Based Capital Asset Charges Are Credit Positive, Moody's Credit Outlook, Sept. 15, 2016, Manoj Jethani, Assistant Vice President – Analyst.