EQUITABLE

DATE: April 11, 2022

FROM: Steve Tizzoni, Head of Actuarial Regulatory Affairs

SUBJECT: Economic Scenario Generator (ESG) Field Test Exposure

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Equitable appreciates the opportunity to comment on the recommended models for the Economic Scenario Generator (ESG) field test. Below are our views on the exposure.

**Treasury Model**: **Recommend testing ACLI Treasury Model as well as GEMS.** Equitable supports the NAIC's desire to test multiple treasury models, as the models each have advantages and disadvantages. As noted in the exposure, the GEMS model presents technical challenges, including the large number of severe negative interest rates and the large frequency and severity of inversions (even in the steady state). The ESG Drafting Group has developed two separate methodologies[1] to mitigate these challenges. While we are optimistic that field testing will prove at least one of these model calibrations will result in a viable interest rate generator, the risk to this outcome merits including the ACLI treasury model in the field test. The analysis presented by the ACLI shows that this model ameliorates certain technical concerns with the GEMS model while still satisfying key regulator criteria (e.g., the number of low-for-long scenarios). Additionally, the ACLI treasury model structurally differs from the two Conning models and closely resembles the current Academy generator, which allows the model to be easily understood and serve as a useful comparative basis relative to the Conning models.

Because adding another model to the field test creates more data to analyze, we suggest a slight extension to the field test to allow more time for insurers to perform analysis on each model. While this would add a small amount of time to the current field test, including the ACLI treasury model further protects against the risk of not having an acceptable interest rate model at the conclusion of field testing, an outcome which could create more significant delays in the ESG project timeline. Alternatively, if regulator preference is to perform more analysis on the ACLI treasury model before potential inclusion in field testing, we would support further discussion of this model in advance of inclusion in a potential second round of field testing.

**Equity Model: Support GEMS Constant ERP Approach. Modify ACLI Model to include an equity / interest rate linkage (if testing alternative models)**: Equitable continues to support a structural linkage between interest rates and equity returns via an equity risk premium. The constant equity risk premium (ERP) approach, as utilized in the GEMS model, reflects the fact that a rational investor would demand expected equity returns in excess of those offered by risk-

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[2] Measuring the prevalence of Low-for-Long scenarios on an absolute basis means comparing the geometric average long term UST rate for each scenario relative to a fixed benchmark, such as 1% or 1.5%, rather than the long term UST rate on a particular valuation date as was done for the 12/31/20 acceptance criteria.

free assets to compensate for bearing such risk. Additionally, this approach is consistent with industry fair value principles and promotes sound risk management, as it increases alignment between liability and hedging instrument valuation.

The ACLI reference model as currently formulated does not have any equity / interest rate linkage. If the NAIC selects the ACLI interest rate model, we would seek to refine the equity component of that model to reflect an equity / interest rate linkage closer to what is in the Conning models currently. Our understanding is that implementing the equity / interest rate linkage requires a very modest code change. We would not support utilizing the ACLI reference model without such adjustments.

Finally, we understand that the NAIC intends to test several different starting conditions as part of the field test. We think this is paramount, as it is necessary to understand (1) how the model behaves across time and (2) industry balance sheet impacts under various starting conditions. As the NAIC works to develop acceptance criteria for time periods other than 12/31/20, one other key consideration to share is that we would expect that under lower starting interest rate environments, scenario sets would exhibit more low-for-long scenarios on an absolute basis[2]. Likewise, under higher starting interest rate environments, scenario sets would exhibit less, but still a meaningful amount, of low-for-long scenarios.

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Equitable appreciates the opportunity to comment on this exposed proposal. We are available to discuss our comments further as desired.

Sincerely,

Stephen M. Tizzoni, FSA, MAAA

Head of Actuarial Methodology and Regulatory Affairs, Equitable

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