Attachment A

Requests Needed to Analyze 12/9/2013 Rector Report

We note as a threshold matter that the starting point for Rector’s analysis was the Milliman model and its underlying assumptions. Thus, to understand Rector’s analysis fully, it is important to know not only how Milliman made its calculations and the factual assumptions on which those calculations were based, but what changes Rector made to Milliman’s assumptions based on historical experience or expectations for the future when it re-ran the Milliman model.

Data Request #1

Appleseed requested detailed information about Rector’s analysis of the Rating Adequacy and Fluctuation factor, which Rector identified as the factor with the greatest impact on the Rector modeling results.1 The Rector report states:

“The rating adequacy and fluctuation factor incorporates a number of different variables… modeling choices relating to the rating adequacy and fluctuation factor are crucial in the methodology used to select a loss outcome. . . . Of the assumption changes that we made in the Milliman model, the changes made to the rating adequacy and fluctuation factor had the most significant impact on the modeling results.”

Rector Report, at 21 (emphasis added). The Rector Report provides a chart of the probabilities and charges against surplus as a percentage of Non-FEP premiums that Rector asked Milliman to incorporate into its model. Id. at 22. However, Rector does not provide information regarding the probabilities and charges included in the original Milliman model. In contrast, Rector provided information regarding Milliman’s modeling factors for Catastrophic Events, id. at 24-25 (providing a chart entitled “Milliman Modeling”), and for Unidentified Growth and Development, id. at 25-27 (providing a chart entitled “Milliman Modeling”). It did not provide a similar chart for Rating Adequacy and Fluctuation. Accordingly, we request the “Milliman Modeling” chart for this factor, which Rector identifies as the factor with the most significant impact.

The Rector Report lists the following aspects that went into Rector’s revisions of Milliman’s rating adequacy and fluctuation factor:

1) Trend Miss Modeling – The Rector report indicates that Milliman did not incorporate probabilities relating to Trend Miss into the stochastic modeling process but instead applied two different trend miss periods to develop two alternative loss scenarios that were incorporated into GHMSI’s pro forma financial statements. Rector revised the

---

1 Although subparts (a) and (b) of Data Request #1 sought “documents” provided by Milliman to Rector or used by Rector, the heart of Data Request #1 is subpart (c) which requests details on how much each of Rector’s revisions to Milliman’s model impacted the probabilities and charges in the tabular values presented on page 22 of the Rector Report.
Milliman model to incorporate Trend Miss into the Rating Adequacy and Fluctuation noting that the Trend Miss factors are “variables with their own probability distribution.” *Id.* at 22. However, Rector does not specify what those probability distributions are. Accordingly, we request the probability distributions Rector used for its Trend Miss analysis.

2) **Trend Modeling** – Rector states that it “made changes to the trend variability assumption and the manner in which trend is incorporated into the rating adequacy and fluctuation factor.” Rector does not say what changes it made to the trend variability assumption and to the way in which this was incorporated into the rating adequacy and fluctuation factor. We therefore request that information.

3) **Modeling for Increased Regulatory Oversight Over Premium Rates** – Although Rector agrees with Milliman that it is appropriate to assume an increase in the time necessary for regulators to review premium rate filings, Rector does not say what time periods it assumed, the probabilities it assigned to them, or what impact those assumptions had on the Rating Adequacy and Fluctuation factor. We thus request that information.

4) **Modeling for Effects of Health Care Reform on Rating and Adequacy Fluctuation Not Reflected in Milliman Model** – Milliman did not model the effect of health care reform; this variable was added entirely by Rector, which states that it “included in the rating adequacy and fluctuation factor the following effects of health care reform that were not included in Milliman’s modeling: underwriting restrictions; policyholder behavioral changes; and coverage mandates.” *Id.*, at 23. Rector lists these effects but does not say how it accounted for each when it revised the Milliman model. We request specific information on how each of these factors was accounted for by Rector in the revised modeling, including any probability distributions employed with respect to these factors.²

Although these requests were not based on the FTI Memorandum (they were made before we received that memorandum), we note that the importance of Data Request #1 is highlighted by comparing Rector’s analysis to information in the FTI memo.

To take one example, as adjusted by Rector, the model predicts standard deviations in predicted surplus changes that are more than two and half times the historical experience. To illustrate, as adjusted by Rector, the annual one-year change in surplus based solely on the Rating Adequacy and Fluctuation factor ranges from a reduction in surplus of 30.1% of non-FEP premiums to an increase in surplus of 18.2% of non-FEP premiums. In contrast the historical one-year changes in surplus due to all factors ranges from a 3.4% reduction to a 9.6% increase in surplus. Large outlier results require greater surplus. Thus, modeling of this single factor appears to require surplus that is significantly larger than historical experience would suggest is necessary. This

² We request further information about how Rector’s analysis took account of health care reform in request #7, described below.
discrepancy between the modeling results and historical experience underscores how important it is to examine the assumptions that yielded such a result.

**Data Request #2**

In this request, Appleseed sought information related to the output results from the stochastic modeling. The Rector Report indicates that the Milliman model is a three component process with the first component being to “use a stochastic modeling process to calculate potential gain or loss outcomes.” *Id.* at 18. The Rector Report indicates that the Milliman model generated “hundreds of thousands of potential gain or loss outcomes taking into account a number of potential events and the probability of occurrence and relative severity of those outcomes.” *Id.* at 10. The outcomes are then ranked from most favorable gains to least favorable losses. *Id.*

Using a desired confidence level, Milliman selects the loss outcome that leads to the result corresponding with that confidence level (for example, if using a 98% confidence level, Milliman selects the loss outcome that produces the 98% worst result of the hundreds of thousands of possibilities.) Milliman then incorporates the financial result associated with that loss outcome into pro-forma financial projections to determine the impact of that loss outcome on GHMSI’s surplus. Appleseed thus requested a spreadsheet of the rank-ordered gain or loss outcomes from the first component of the process and, for each outcome, the value of each of the 13 factors (the 12 from Milliman plus the premium growth factor created by Rector) that helped to create the outcome. Appleseed also requested a spreadsheet of the projected impact on GHMSI’s surplus after incorporating the loss outcomes into pro-forma financial projections.

In response to Appleseed’s request for rank-ordered gain or loss outcomes, the Commissioner stated that “R&A was not provided with a spreadsheet listing the hundreds of thousands of potential gain or loss outcomes. DISB has asked CareFirst to inquire from Milliman if this data is available. . . .” As noted above the Rector Report indicates that these outcomes were ranked by Milliman and then used as an input to the pro-forma financial projections. These outcomes must exist in a readily available electronic format, even if they were not provided in that format to Rector. We therefore request that information. Moreover, even if Rector was provided with, and used only, certain gain or loss outcomes for the financial projection component, we request that those outcomes used by Rector for the financial projections component be identified.

In response to Appleseed’s request for a spreadsheet showing the projected impact on GHMSI’s surplus after pro-forma financial projections were made, the Commissioner responded that “R&A does not believe it is possible to generate such a spreadsheet during the pro forma financial projection component of the modeling process.” However, we understand from extensive discussions with Milliman, Rector, and the Commissioner’s representatives that the stochastic modeling results were rank-ordered to allow outcomes associated with various certainty thresholds (75%, 85%, 95%, 98%) to be identified and input through the pro-forma financial projection component of the modeling process. Although we understand that not all gain/loss outputs from the stochastic modeling component were put through the pro-forma modeling
component, we request, for all scenarios that were put through the financial projection component, the resulting projected impacts on GHMSI’s surplus after the loss outcomes were applied to the pro-forma financial projections.

The stochastic modeling is the basis for Milliman’s model. It drives Milliman’s and Rector’s conclusions. The outputs and inputs at each stage are critical for any independent assessment of those conclusions.

**Data Request #3**

Appleseed requested complete tabular information for each of the nine factors for which Rector agreed with Milliman regarding the probability of the occurrence and the outcome of certain events. If any of these factors represents the impact of more than one component we requested detailed information on each component of each factor.

The model was driven by 12 factors. Rector has disclosed only three of them, and included in its report probability distributions for those three, which, it says represent revisions to the distributions initially employed by Milliman. As with the other elements in our data requests, a “black box” approach to the other nine would be inconsistent with fairness; would mean that there is not a complete record; would preclude the possibility for independent assessment; and would not enable the Commissioner to perform his MIEAA review function as intended by the DC Council and as required by the Court of Appeals.

**Data Request #4**

Rector asked Milliman to include selected probabilities of premium growth levels in the model. Premium growth increases risks (whether of size or probability), and it increases RBC. The greater the assumed premium growth, the greater the calculated surplus requirement. Accordingly, Appleseed requested information relative to assumptions concerning Premium Growth Levels.

Although Rector offers some reason for departing from historical experience concerning premium growth, it is not clear how some of the cited factors bear on future premium revenue or why premium growth rates used by Rector depart so far from historical experience. *See id.* at 28-29. Full disclosure is clearly essential here.

Moreover, Appleseed needs information about current enrollment data in order to understand Rector’s results. The Commissioner’s response states “current enrollment data is available in

---

3 Rector disclosed the following factors: Rating Adequacy and Fluctuation; Catastrophic Events; and Unidentified Growth and Development. The May 31, 2011 Milliman Report, on which Rector relies, disclosed seven total factors including the three listed above and four additional factors (Unpaid Civil Liabilities and Other Estimates; Interest Rate and Portfolio Asset Value Fluctuation; Overhead Expense Recovery Risk; and Other Business Risks). Given the discrepancy between the twelve factors referenced by Rector and the seven factors specified by Milliman, we cannot be sure to which twelve factors Rector refers.
the annual statement and if there is specific current enrollment data that is not in the annual statement that you want, that can be provided.” The annual statement does not contain this detailed information. We therefore request that the 2012 earned premiums for comprehensive medical insurance be split into Individual, Small Group, and Large Group. It is now evident that this level of specificity is essential for a complete analysis of Rector’s premium growth assumptions.

The Commissioner’s response indicates that projected increases in the company’s individual enrollment were based on the “Society of Actuaries’ March 2013 research report titled “Cost of the Future Newly Insured Under the Affordable Care Act.” This report does not provide any carrier-specific information, and, for markets, provides a variety of scenarios. Accordingly, it is important for Rector to explain how these data were used to derive premium growth levels specific to GHMSI.

**Data Request #5**

Appleseed asked for all data for all validation tests Rector performed. Please confirm that there is no additional validation information other than the FTI memo dated February 7, 2014, which was provided to us.

**Data Request #6**

Appleseed asked Rector to identify each MIEAA standard it applied and how it applied that standard. The Commissioner has addressed this to some extent in his response, and we will assume this is a complete response unless the Commissioner or Rector supplements it.

**Data Request #7**

Appleseed asked for each of the positive and negative impacts of health care reform that Rector took into account, and a quantification of the impact of each of those in the model used by Rector. Although the Rector Report does, in a general way, identify some impacts it considered, it does not quantify any of those impacts or explain the choices Rector made. The reasonableness of Rector’s choices cannot be determined without the requested data.

**Data Request #8**

Appleseed asked that Rector explain, in detail, why Rector’s target surplus ratio changed from 600% (to avoid a 200% RBC level at a 99% confidence level) in its 2009 report to 958% (to avoid a 200% RBC at a 98% confidence level) in the current report.

This 60 percent increase in Rector’s recommended surplus level clearly requires full, detailed, explanation. The Commissioner stated on February 10 that Rector is “in the process of further analyzing the causes” of this change, and we look forward to receiving this analysis.

**Data Request #9**
Appleseed asked that Rector explain the “extremely adverse events” that have been incorporated into the model in order to be, in Rector’s phrase, “appropriately conservative,” and any adjustments to the assumed probabilities or magnitudes for such events. There were two reasons for this request.

First, it was our understanding from the discussions with Milliman, Rector, and the Commissioner’s representatives that Rector was going to choose probabilities and magnitudes that were “down the middle of the fairway” (i.e., best estimate) and neither conservative nor aggressive, because the confidence level in addition to the underlying RBC calculation itself would provide an appropriate degree of conservatism under the MIEAA standards. If Rector has instead incorporated “conservatism” in any of the probabilities or magnitudes with regard to any of the three factors (not only catastrophic events) as to which Rector made adjustments to Milliman’s assumptions, or if Rector incorporated “conservatism” in any other respect into the model, we ask for data explaining how that “conservatism” was implemented in order to allow an analysis of how this approach comports with the statutory standards.

Second, we asked for a description of the multiple extremely adverse events that the model assumes could occur in order that we (and the Commissioner) would have an opportunity to assess whether it is appropriate under MIEAA to increase surplus (and correspondingly decrease community reinvestment) to guard against such events. Without a description of those events, such an assessment cannot be made.