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Proposed Transfer of Runoff Business from OneBeacon Insurance Group to Armour Group  
Holdings Limited

Analysis of Financial Capacity

by

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## I. INTRODUCTION

1. I, Allan Kaufman, am a Managing Director at FTI Consulting, Inc. ("FTI"). FTI has been retained by Anderson Kill, P.C. ("AK") on behalf of Colgate-Palmolive Company ("Colgate") to proffer certain opinions regarding the restructuring of OneBeacon Insurance Group's ("OBIG") runoff business (the "Proposed Transaction"). Specifically I have been retained to opine on:
  - The extent to which the Proposed Transaction affects the financial capacity to pay valid policyholder claims on a timely basis ("Financial Capacity"); and,
  - Methods of improving the Proposed Transaction from the perspective of Financial Capacity.
2. Beginning in 2009, OBIG took steps towards restructuring the OBIG insurance companies to separate their runoff business from their specialty operations.<sup>1</sup> Subsequent to a number of intercompany transfers that were made within OBIG,<sup>2</sup> the final step of the restructuring will be the sale of OBIG's runoff business through the divestiture of its subsidiaries, OneBeacon Insurance Company ("OBIC") and its subsidiaries OneBeacon America Insurance Company ("OBA") and The Employers' Fire Insurance Company ("EFIC"), as well as Potomac Insurance Company ("Potomac") (collectively the "Runoff Companies"<sup>3</sup>), to Armour Group Holdings Limited ("Armour"), through its subsidiary Trebuchet US Holdings, Inc. Details of the sale are set forth in the Stock Purchase Agreement ("SPA").<sup>4</sup> OBIG cites PA §§ 991.1401<sup>5</sup> as the legal standard that the Pennsylvania Insurance Department ("PID") must follow with regard to the divestiture to Armour.
3. The Proposed Transaction includes "Ancillary Transactions"<sup>6</sup> that are to be completed, with PID approval, prior to implementation of the SPA. In forming my opinions, I have considered the effects of both the SPA and the Ancillary Transactions. OBIG does not cite the legal standard it believes the PID must follow with regard to the Ancillary Transactions.
4. In the event the Proposed Transaction is effected, the Runoff Companies will consist of OBIC and subsidiaries, and Potomac as a sister entity, owned by Armour, while Atlantic Specialty Insurance Company ("ASIC") and its subsidiaries (the "Ongoing Companies"), will be owned by OBIG.

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<sup>1</sup> OneBeacon Cumulative Log available on the Pennsylvania Insurance Department website, available at [http://www.portal.state.pa.us/portal/server.pt/community/industry\\_activity/9276/onebeacon\\_cumulative\\_log/1579214](http://www.portal.state.pa.us/portal/server.pt/community/industry_activity/9276/onebeacon_cumulative_log/1579214) ("Cumulative Log"), Document 107 (OBIG Reply, p. 50).

<sup>2</sup> OBIC and OBA 2012 Annual Statements, Notes 10B and 26.

<sup>3</sup> Throughout this report I refer to my analysis of the Runoff Companies. For purposes of my analysis, I treat the Runoff Companies as a consolidated entity, that is, the consolidation of OBIC, its subsidiaries, and Potomac.

<sup>4</sup> Cumulative Log, Document 004 (SPA), Document 005 (Amendment No. 1 to SPA), Documents 043, 062, 063, 064, 065 (Exhibits to SPA).

<sup>5</sup> Pennsylvania Insurance Holding Companies Act, Article XIV of the Insurance Company Law of 1921, Act of May 17, 1921, P.I. 682, as amended, 40 P.S. §§ 991.1401 *et seq.*

<sup>6</sup> Cumulative Log, Document 062 (Exhibit: Restructure to SPA).

5. On July 23, 2014, the PID held a public hearing (the "Hearing") at which OBIG and its adviser, Towers Watson ("TW"), and Risk & Regulatory Consulting ("RRC") on behalf of the PID, submitted documents and made oral statements.<sup>7</sup> I attended the Hearing and have reviewed these documents and oral statements, as well as the documents related to i) the Form A seeking approval of Armour's acquisition of the Runoff Companies ("Form A") and ii) the OBIG intercompany transactions beginning in 2009 that led to the current Proposed Transaction.
6. The documents I have reviewed and relied upon in forming my opinions are listed in **Exhibit 2**.

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<sup>7</sup> Cumulative Log, Document 105 (Hearing Transcript).

## II. EXPERIENCE

7. I have over 40 years of experience in executive and consulting roles in the US, Europe and Asia. My assignments have included expert testimony; capital modeling and capital adequacy; financial planning; risk assessment; regulatory issues; Solvency II; loss reserving including asbestos reserving; ratemaking and rating plans; merger and acquisition analyses; product development; and design of actuarial functions.
8. I have prepared testimony for US and English Courts and have testified in depositions and at Court. I have delivered expert opinions and reports before arbitration and regulatory forums, in US and UK courts in a variety of matters, including professional liability; reinsurance disputes; insurer litigation; rating plans; financial conditions; and tort reform.
9. My consulting clients have included multi-line primary and reinsurance companies, Lloyd's syndicates, other London market reinsurers, and specialty companies in areas including asbestos and environmental; workers compensation; medical malpractice; professional liability; health; title; and warranty insurance.
10. I have supervised the development of ground-up asbestos models and led or participated in numerous ground-up asbestos studies.
11. I have supervised the development of stochastic modeling systems and participated in projects using those tools.
12. In 2008-2009 I served as Independent Expert on the Equitas Part VII Transfer sanctioned by the High Court in June 2009, which required analysis that included components similar to those presented in support of the Proposed Transaction. I served as Independent Expert on one additional Part VII Transfer and worked with colleagues in the UK on other transfers where I was not the appointed Independent Expert. I have not, before this, worked as an expert for policyholders on these matters in the UK or the US.
13. I have been the practice leader for the actuarial practices of a major actuarial consulting firm and a "big-four" firm in the US and Europe and other jurisdictions.
14. I am a Fellow of the Casualty Actuarial Society (1974), a Member of the American Academy of Actuaries (1995) and an Honorary Fellow of the UK Institute of Actuaries (1998). I hold the designation Chartered Property/Casualty Underwriter and have held a Lloyd's Reserve Practicing Certificate.
15. I served as President of the Casualty Actuarial Society (1994) and the American Academy of Actuaries (1997) and on the General Insurance Practice Executive Committee of the UK Institute of Actuaries (2002, 2007-2009).
16. I have published papers on US Risk Based Capital, EU Solvency II, capital management issues, and other subjects. I have been a member of the UK Institute of Actuaries Solvency II working parties, providing comments to CEIOPS regarding Solvency II issues on Group regulation and technical provisions.

17. I have University degrees in Mathematics and Physics.
18. I am a member of the Global Insurance Services team of FTI. FTI is a multi-disciplinary consulting firm with leading practices in economic, financial and litigation consulting services. FTI performs financial investigations and provides advice and expert testimony with respect to, among other things, insurance matters, accounting matters, securities matters, damages, fraud, solvency, intellectual property and valuation.
19. I am also, currently, a Non-Executive Director and Chair of the Audit Committee for an insurance entity based in London.
20. My curricula vitae is provided in **Exhibit 1**.

### III. EXECUTIVE SUMMARY

21. Based on the information made available to me, and for the reasons outlined below, it is my opinion that the Proposed Transaction, most importantly because of the Ancillary Transactions, provides inadequate Financial Capacity to support the Runoff Companies obligations to Colgate and its other policyholders.
22. In the event the Proposed Transaction is approved, to place the Runoff Companies policyholders in the same position with respect to Financial Capacity in 2009 when the OBIC restructuring began, i.e., to maintain the status quo, the Financial Capacity of the Runoff Companies would need to be increased by one of or a combination of methods such as the following:<sup>8</sup>
  - Added capital of **\$530 million**;<sup>9</sup> or
  - Additional<sup>10</sup> retroactive reinsurance of **\$1.6 billion**;<sup>11</sup> or
  - Financial guarantees<sup>12</sup> from the Ongoing Companies (or their successors).
23. In my opinion, comparing the Proposed Transaction to the status quo, as well as to other runoff transactions, is relevant and was suggested by Deputy Insurance Commissioner Stephen Johnson and OBIG.<sup>13</sup>

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<sup>8</sup> While this report addresses capital adequacy, it does not address operational controls that will/will not be implemented by Armour should the Proposed Transaction be approved. For example, controls related to claims or expenses might address concerns of policyholders that are not related to capital adequacy.

<sup>9</sup> The increased initial capitalization could be achieved through an infusion of cash, secured by surplus notes or otherwise. For example, the SPA contemplated that, if required by the PID, additional surplus notes up to 50% of OBIC capital and surplus could be provided by OBIG. (Cumulative Log, Document 079 (Amendment 1 to Form A, Exhibit SPA – A3, p. 1).)

<sup>10</sup> Beyond that currently provided by National Indemnity Company (“NICO”) and General Reinsurance Corporation (“GenRe”). The NICO and GenRe reinsurance treaties are defined in: Cumulative Log, Document 082 (RRC Reserve Report, p. 6).

<sup>11</sup> Capital earns interest to support potential claims, while reinsurance does not. Therefore, the reinsurance equivalent to \$100 of capital is more than \$100. Refer to Section IV.B for further discussion of that equivalence.

<sup>12</sup> Analogous to AIG’s unconditional capital maintenance agreements with its insurance subsidiaries, or a dividend retention plan such as that between Century Indemnity Company and INA Financial Corporation. (AIG 2013 Form 10-K, p. 132; Century Indemnity Company 2013 Annual Statement, p. 14.18.) These might be triggered to the extent that cash is required or in the event that the Runoff Companies’ surplus falls below a specified threshold such as the risk-based capital Company Action Level or Authorized Control Level, as further explained in Footnotes 32 and 47.

<sup>13</sup> Cumulative Log, Document 105 (Hearing Transcript, 108:21-109:8; 110:25-111:5; 111:11-111:17); Document 107 (OBIG Reply, pp. 23-24).

24. In addition to and in support of my opinions above, I have the following conclusions:

- **Conclusion 1** (Section IV):

Compared to the status quo, the Proposed Transaction will significantly diminish the Financial Capacity available to fully pay valid claims of Colgate and other policyholders of the Runoff Companies on a timely basis.

I estimate that to provide the Runoff Companies policyholders with the Financial Capacity equivalent to the status quo, the Runoff Companies require additional capital of at least **\$530 million**, or reinsurance of at least **\$1.6 billion**, beyond the amounts in the Proposed Transaction.

- **Conclusion 2** (Section V):

Compared to other runoff transactions, the Proposed Transaction is among the most poorly capitalized and therefore the most risky to the Runoff Companies policyholders.

In Section V, I also identify the additional capital required to establish the Runoff Companies with the same Financial Capacity as other recent runoff companies. The \$530 million increase in capital indicated based on the status quo is within the range of these comparative transactions.

25. Conclusions 1 and 2 contradict OBIG's assertion that the TW Stochastic Report demonstrates that the Proposed Transaction ". . . has a balance sheet that has been rigorously tested and designed to meet the future obligation of the Runoff Companies."<sup>14</sup>

26. To support my conclusion that additional initial capital or other support is necessary to produce an equitable transaction, I also observe that the TW Stochastic Report<sup>15</sup> indications do not support the Proposed Transaction, as follows:

- **Conclusion 3** (Section VI):

OBIG has used the TW Stochastic Report to assert that there is no reason to believe that additional capital might be required, or that timely payment to the Runoff Companies policyholders would be at risk for the next 20-30 years.<sup>16</sup> That is not correct in that the TW Stochastic Report has no view on when claim payments might be interrupted by Technical Insolvency.<sup>17</sup> Further, based on my experience as the Independent Expert for the Equitas Business Transfer, I believe that if TW had estimated the time until Technical Insolvency, the time likely would have been **eight**

<sup>14</sup> Cumulative Log, Document 107 (OBIG Reply, p. 15).

<sup>15</sup> Cumulative Log, Document 080 (TW Stochastic Report).

<sup>16</sup> Cumulative Log, Document 105 (Hearing Transcript, 208:24-209:20).

<sup>17</sup> TW uses the term "Success/Failure" to refer to the time at which assets are fully depleted, i.e., by analogy, when OBIG checks are returned for insufficient funds. (Cumulative Log, Document 080 (TW Stochastic Report, Table 1, p. 5).) The time at which payments would be interrupted is no later than the time at which it would be recognized that the Runoff Companies' assets would not be adequate to pay all valid policyholders claims in full. I use the term "Technical Insolvency" to refer to this time when assets would not be sufficient to pay for estimated liabilities.

years, rather than 20-30 years, and therefore the Proposed Transaction is much more risky than presented.

- **Conclusion 4 (Section VII):**

Based on insurance industry practices and OBIG's own financial standards, the 12% chance that "invested assets [will] fall to zero [within 30 years] before the last claim is paid," as indicated by the TW Stochastic Report,<sup>18</sup> does not provide reasonable security that valid claims covered by Colgate's policies will be paid in full on a timely basis over a 30+ year payment time frame. Moreover, it provides even less security that a Technical Insolvency will not occur over an eight year time frame.

Considering Conclusions 3 and 4, the Proposed Transaction should be rejected based on the findings in the TW Stochastic Report because the 12% Payment Failure Rate (defined in Footnote 18) is too high and does not protect the interests of the policyholders.

- **Conclusion 5 (Section VIII):**

The scope of the TW Stochastic Report did not include preparation of balance sheet projections. Therefore, important issues affecting the Payment Failure Rate are not recognized in TW's stochastic modeling. For example, some of the features not reflected in the TW stochastic modeling that could only increase the Payment Failure Rate are:

- (a) the high rate of return produced by the equity investment strategy will not be achievable in all scenarios;
- (b) there is no allowance for any minimum capital prior to cession of business as usual; and,
- (c) there is no allowance for scenarios in which the simulated liability estimate produces a Technical Insolvency but assets would turn out to be adequate to cover the cost of claims.

In addition, in certain scenarios TW presumes PID authorization for special practices that are not discussed by TW, RRC or OBIG. In particular, the TW payment success rate modeling assumes that the PID will permit discounting of the Runoff Companies' loss reserves and that the PID will permit the Runoff Companies to make claim payments in the normal course when capital is as little as \$1 above Technical Insolvency.

Proper consideration of the issues in Conclusion 5 increase the chance that valid policyholder claims will not be paid in full on a timely basis.

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<sup>18</sup> Cumulative Log, Document 080 (TW Stochastic Report, p. 4). I refer to this 12% chance as the "Payment Failure Rate," which is the complement of the 88.28% "Successes after 30 years" rate. (Cumulative Log, Document 080 (TW Stochastic Report, Table 1, p. 5).)

- **Conclusion 6** (Section IX)

TW and OBIG have not fully responded to the questions raised at the Hearing. In instances when they have responded, I disagree with a number of their responses.

- **Conclusion 7** (Section X)

In the conclusions in Sections IV-IX, I accept the TW Payment Failure Rate. However, on balance, it appears that the RRC Stochastic Report<sup>19</sup> implies that the Payment Failure Rate is higher than the 12% indicated by TW.

27. I am aware that Jonathan Terrell has issued an expert report, dated July 21, 2014, and a supplemental report thereto dated October 16, 2014 (the "Terrell Supplemental Report"). In the Terrell Supplemental Report, Mr. Terrell responds to certain points made in the OBIG Response to Public Comments, dated August 12, 2014 (the "OBIG Reply")<sup>20</sup> and the TW Response to Public Comments, dated August 11, 2014 (the "TW Reply").<sup>21</sup> In his response, Mr. Terrell proposes recommendations to the PID to "provide some additional protections to policyholders if the [PID] approves the Proposed Transaction."<sup>22</sup> While I have not addressed all of the recommendations in this report, in my opinion Mr. Terrell's recommendations in the Terrell Supplemental Report complement my opinions and conclusions set forth in this report.
28. The information and opinions in this report are based upon materials made available to me and my staff, working at my direction, to date. If additional materials relevant to this report are subsequently provided to me and/or my staff, I reserve the right to revise, supplement, or amend my analysis and opinions.
29. The remainder of this report sets forth my opinions in greater detail and provides the bases for my opinions.

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<sup>19</sup> Cumulative Log, Document 083 (RRC Stochastic Report).

<sup>20</sup> Cumulative Log, Document 107.

<sup>21</sup> Cumulative Log, Document 108.

<sup>22</sup> Terrell Supplemental Report, p. 22.

#### IV. MAINTAINING THE STATUS QUO WILL REQUIRE SUBSTANTIALLY MORE CAPITAL FOR THE RUNOFF COMPANIES THAN CONTEMPLATED BY THE PROPOSED TRANSACTION

30. At the Hearing, Mr. Johnson posed the following question:

So you're for the status quo. And that's fine, I understand that. But what I want to understand is what is your belief, is how does OneBeacon have to fund future adverse development within the runoff operation? What legal requirement is there when there are separate corporate entities involved? And what is --- why do you believe the status quo could be more beneficial than the transaction itself?<sup>23</sup>

31. To address that question, it is necessary to recognize that there are two parts of the Proposed Transaction:

- Ancillary Transactions that are to be completed, with PID approval, prior to implementation of the SPA.<sup>24</sup>
- The sale of OBIC, including its subsidiaries (after the transfer of ASIC and its subsidiaries from OBIC to OBIG), and Potomac, to Armour.

##### A. FINANCIAL IMPACT OF ANCILLARY TRANSACTIONS AND SALE TO ARMOUR

32. I understand that OBA is the successor to Employers' Commercial Union Insurance Company, Commercial Union Insurance Company, Employers' Liability Assurance Corporation, and other related insurance companies, the insurers that issued Colgate's policies for the years 1950 through 1983.<sup>25,26</sup>

33. Given OBA's relationship with OBIC as its parent and with Potomac as an affiliate, I have analyzed the key balance sheet elements and analytical statistics for OBA, OBIC and Potomac annually from 2009 to 2013. These are presented in **Exhibits 3A, 3B, and 3C**.

34. For OBA I observe that there was substantial reinsurance between OBA and OBIC.<sup>27</sup> At year-end 2013, 100% of OBA claim liabilities were reinsured by OBIC.<sup>28</sup>

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<sup>23</sup> Cumulative Log, Document 105 (Hearing Transcript 108:22-109:4).

<sup>24</sup> Cumulative Log, Document 062 (Exhibit: Restructure to SPA), Document 079 (Amendment 1 to Form A, p. 4).

<sup>25</sup> Cumulative Log, Document 057 (June 19, 2013 AK Public Comment Letter, Petition to Intervene, p. 3 and Exhibit A).

<sup>26</sup> I present my results considering Colgate policies to allow for specificity in my explanations. However, I expect that the situation is identical or similar for many other policyholders.

<sup>27</sup> Refer to **Exhibit 3A**. Ceded reinsurance to affiliates was in excess of \$1 billion in all years, 100% of which were ceded to OBA's parent, OBIC. (OBA 2009-2013 Annual Statements, Schedule F – Part 3.)

<sup>28</sup> OBA 2013 Annual Statement, Schedule P – Part 1 – Summary, Schedule F – Part 3.

35. Thus, the Financial Capacity supporting Colgate's policies has been provided by OBIC as the direct reinsurer of all OBA<sup>29</sup> claim obligations. In addition, OBIC has substantial financial support in the form of reinsurance from Potomac, an affiliated company owned by OBIG.<sup>30</sup>
36. Therefore, I evaluate the Financial Capacity supporting the Colgate policies prior to and subsequent to the Proposed Transaction considering the relevant portions of OBIC, its subsidiaries, and Potomac:
- Prior to the Proposed Transaction the Financial Capacity is that of OBIC, including its subsidiaries at the time (and thus including ASIC, one of the Ongoing Companies), and Potomac. I treat OBIC and Potomac as a single legal entity, while treating the subsidiaries as subsidiaries (including ASIC).
  - Subsequent to the Proposed Transaction the Financial Capacity is that of the Runoff Companies only, for which I treat OBIC, its subsidiaries,<sup>31</sup> and Potomac as a single legal entity.
37. As OBIG began the restructuring in 2009, for purposes of this comparison I treat the "status quo" as December 31, 2009.
38. I evaluate the Financial Capacity of the status quo versus the Proposed Transaction using the ratio of Total Adjusted Capital ("TAC") to Authorized Control Level ("ACL") from the National Association of Insurance Commissioners ("NAIC") Risk Based Capital ("RBC") formula.<sup>32,33</sup> The ACL is a regulatory measure of the company's risk. TAC is a measure of the financial resources available to meet the cost of those risks if they develop. The ratio can measure a company's capital adequacy relative to risk.
39. I note that using the ACL metric underestimates the capital needed by the Runoff Companies in that ACL assumes that there are interest-earning assets equal to claim

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<sup>29</sup> Refer to **Exhibit 3A**. It is not central to this analysis, so I do not explore it, but Colgate's policies may have been reinsured by various OBIG entities in the past through pooling or other intra-group reinsurance arrangements.

<sup>30</sup> Potomac is supported by reinsurance with two third parties—NICO and GenRe.

<sup>31</sup> I treat the subsidiaries as part of OBIC and not as separate companies in that (i) the Ancillary Transactions will merge some of the subsidiaries, and (ii) the treatment as subsidiaries or on a consolidated makes little difference at the June 30, 2014 evaluation date.

<sup>32</sup> RBC is a "method of measuring the minimum amount of capital appropriate for a reporting entity to support its overall business operations in consideration of its size and risk profile." (Definition available at [http://www.naic.org/cipr\\_topics/topic\\_risk\\_based\\_capital.htm](http://www.naic.org/cipr_topics/topic_risk_based_capital.htm).)

If an insurer's TAC falls below the ACL, and "[i]f the commissioner deems it to be in the best interests of the policyholders and creditors of the insurer and of the public, [the commissioner will] take such actions as are necessary to cause the insurer to be placed under regulatory control." (Risk-Based Capital (RBC) For Insurers Model Act, January 2012, p. 312-8.)

<sup>33</sup> My analysis uses ACL as a measure of risk, without specific regard to its use in regulation. Other methods of risk measurement, perhaps supported with more detailed information, might provide a different risk assessment, but I have not been provided with access to any such detailed information. The TW Stochastic Report, for example, does not compare the status quo to the situation that will exist should the Proposed Transaction be approved.

reserves subject to risk. The Runoff Companies, to the contrary, have non-interest earning NICO and GenRe reinsurance that is fully exhausted, rather than interest earning assets.

40. As the basis for my evaluation, I use the information in Table IV-1 below:

**Table IV-1**  
*Summary of Financial Capacity*  
(TAC and ACL in millions)

	(A)	(B)	(C)	(D)	(E)	(F)
	December 31, 2009			June 30, 2014		
Entity	TAC	ACL	TAC/ ACL	TAC	ACL	TAC/ ACL
(1) OBIC+ASIC+Potomac	\$1,333	\$323	4.1	NR	NR	NR
(2) Runoff Companies	NR	NR	NR	\$130	\$161	0.8
(3) Ongoing Companies	NR	NR	NR	\$746	\$129	5.8

Source: Exhibit 5.

NR = Statistic is not required for my analysis.

41. To develop Table IV-1 above, which I explain in detail in Exhibit 5, I have made the following assumptions:

- Potomac is treated as part of OBIC (in 2009) and as part of the Runoff Companies (in 2014) because the Financial Capacity of OBIC (in 2009) and the Runoff Companies (in 2014) depends on the risks that are included in Potomac. The financial security of OBIC and the Runoff Companies is overstated if they do not include the risks covered by Potomac, in that to the extent that claims covered by the NICO treaty exceeded the limit provided by the NICO treaty, the cost of the claims in excess of the limit would become an obligation of OBIC.
- I calculated the ACL at December 31, 2009 and June 30, 2014 to include the current TW central estimate of reserves for NICO-reinsured lines, or \$230 million above the December 31, 2013 carried reserve (i.e., \$198.3 million additional reserve within the NICO limit<sup>34</sup> plus \$31.7 million above the NICO limit<sup>35</sup>). If I had not reflected that TW estimate, the Financial Capacity of both the status quo and Runoff Companies would be overstated.
- I calculated the TAC at December 31, 2009 and June 30, 2014 to include \$31.7 million in net reserves above the level shown in the Runoff Companies' Closing Pro Forma,<sup>36</sup> as that is the amount by which the TW estimate of reserves exceeds the NICO limit.

<sup>34</sup> Potomac 2013 Annual Statement p. 14.18.

<sup>35</sup> \$31.7 million represents the \$10 million increase TW's central estimate, plus \$21.7 million, or the amount that TW's central estimate exceeds the NICO limit of coverage. (Cumulative Log, Document 080 (TW Stochastic Report, p. 6) and TW Reserve Report as of September 30, 2012, December 31, 2012 and March 31, 2013, p. 12.)

<sup>36</sup> The Closing Pro Forma reflects net reserves of \$156 million as of June 30, 2014. (Cumulative Log, Document 080 (TW Stochastic Report, p. 6).)

42. Of significance, Table IV-1 (column F, row 2) demonstrates that after effecting the Proposed Transaction, the TAC/ACL ratio for the Runoff Companies will be 0.8. Table IV-2 below shows that by being left with a TAC/ACL ratio of 0.8, the security of the Runoff Companies policyholders would be reduced by 80% to only 20% of what it was prior to the Proposed Transaction.

**Table IV-2**

*Change in Runoff Companies' TAC/ACL, Before and After the Proposed Transaction*

(1)	December 31, 2009 (Status Quo) <sup>37</sup>	4.1
(2)	Runoff Companies' Pro Forma After Proposed Transaction <sup>38</sup>	0.8
(3)	<b>Change</b>	<b>-80%</b>

**B. MAKING THE PROPOSED TRANSACTION MORE EQUITABLE FOR POLICYHOLDERS**

43. In Table IV-3 below I calculate the additional capital required to leave the Runoff Companies policyholders in the same situation with respect to Financial Capacity as the status quo.

**Table IV-3**

*Additional Initial Capital Necessary to Preserve the Financial Capacity of the Runoff Companies After the Proposed Transaction—Status Quo*  
(dollar amounts in millions)

			Source
(1)	Target Ratio TAC/ACL (December 31, 2009)	4.1	Table IV-1, C1
(2)	ACL – Runoff Companies (6/30/14)	\$161	Table IV-1, E2
(3)	TAC Required to Maintain Financial Capacity	\$660	Row 1 * Row 2
(4)	TAC in Proposed Transaction	\$130	Table IV-1, D2
(5)	<b>Additional Capital Needed</b>	<b>\$530</b>	Row 3 – Row 4
(6)	Reinsurance Multiplier	3.0	See ¶ 44 below
(7)	<b>Alternative Additional Reinsurance Needed</b>	<b>\$1,590</b>	Row 5 * Row 6

44. In the above table, I use a reinsurance multiplier of 3.0 to relate additional finite reinsurance to current additional assets. That factor considers that RRC reports that the \$31.7 million reserve deficiency indicated by TW's Reserve Report<sup>39</sup> was offset by the

<sup>37</sup> Refer to Table IV-1, column C, row 1.

<sup>38</sup> Refer to Table IV-1, column F, row 2.

<sup>39</sup> Refer to Footnote 35 for the calculation of the \$31.7 million reserve deficiency.

surplus note provided to Armour in the amount of \$6.7 million,<sup>40</sup> or a ratio of 4.7 (i.e., \$31.7 million / \$6.7 million). As that ratio is based on a rate of return that implies substantial investment risk, I have chosen a lower ratio, 3.0, which corresponds to approximately a 4.5% return on assets held for 25 years.<sup>41</sup>

**Conclusion 1:**

Compared to the status quo, the Proposed Transaction will significantly diminish the Financial Capacity available to fully pay valid claims of Colgate and other policyholders of the Runoff Companies on a timely basis.

I estimate that to provide the Runoff Companies policyholders with Financial Capacity equivalent to the status quo, the Runoff Companies require additional capital of at least **\$530 million**, or reinsurance of at least **\$1.6 billion**, beyond the amounts in the Proposed Transaction.

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<sup>40</sup> RRC states, "We note that the capital being contributed by One Beacon in the form of surplus notes does cover the difference between current held NICO reserves and Towers midpoint for fully developed NICO losses." (Cumulative Log, Document 083 (RRC Stochastic Report, p. 9).) RRC also states, "The current set of assumptions, which adds \$6.7 million of additional capital . . ." (Cumulative Log, Document 083 (RRC Stochastic Report, p. 5).) I understand those comments are related, and that the \$6.7 million is intended to cover the present value of the difference between the NICO limit and the TW central estimate.

<sup>41</sup>  $(1.045)$  to the 25<sup>th</sup> power, i.e., 4.5% for 25 years, is 3.0.

## V. COMPARATIVE RUNOFF TRANSACTIONS

45. OBIG identifies some recent runoff companies that it considers successful:
- Clarendon National Insurance Company and Clarendon America Insurance Company (purchased by Enstar in 2011);
  - Quanta Indemnity Company (purchased by Catalina in 2008);
  - Western General Insurance Ltd. (purchased by Catalina in 2010); and
  - Providence Washington Insurance Company (purchased by Enstar in 2010).<sup>42</sup>
46. I understand that OBIG is claiming, in part, that these examples prove that not all runoff companies fail. I also understand the OBIG may be implying, in part, that the Proposed Transaction is “as good as” these other transactions.
47. Mr. Johnson states:
- But since then [the mid ‘90s], I don’t --- what other runoff company, pure runoff company --- because I’m not sure I’m aware of a pure runoff company that actually has been placed into liquidation up to this point in time subsequent to, you know, the early 2000s. And if you have examples, it’s important to point them out.<sup>43</sup>
48. To address Mr. Johnson’s concern, Table V-1 shows how the Proposed Transaction compares to 23 other runoff transactions,<sup>44</sup> including those above identified by OBIG.<sup>45</sup> It includes the company name, the runoff acquirer, the year of the latest runoff transaction, ACL, and the financial security, measured by TAC/ACL. All else being equal, the higher the TAC/ACL ratio, the more secure the transaction.
49. Based on the TAC/ACL ratios in Table V-1, the summary statistics in Table V-2 below it show that:
- The indicated additional capital, beyond the amount included in the Proposed Transaction, ranges from \$337 million to \$1.9 billion.
  - The weighted average and median levels of indicated capital are \$643 million and \$723 million, respectively.

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<sup>42</sup> Cumulative Log, Document 107 (OBIG Reply, p. 24).

<sup>43</sup> Cumulative Log, Document 105 (Hearing Transcript, 111:11-111:17).

<sup>44</sup> Some runoffs arise from the fact that a legal entity has decided to cease operations. In this case the legal entity is splitting its business into two categories, runoff and ongoing, and asks regulatory approval for that split. Some runoffs arise from the fact that the overall entity has decided it has inadequate resources to continue to operate. The less secure of the runoffs may be of the latter type. I understand that the Proposed Transaction is of the former type.

<sup>45</sup> Western General Insurance Ltd. is not included in Table V-1 because it not currently an NAIC regulated entity and does not file an NAIC Annual Statement needed for this comparison.

- With the adjusted proposed capitalization of \$130 million, as reflected in Table IV-3, or the unadjusted capitalization of \$162 million,<sup>46</sup> nearly all of the 23 comparative runoff transactions had much higher initial capitalization than the Proposed Transaction. The Proposed Transaction would reflect one of the lowest levels of capitalization, and, in fact, the lowest except for companies that began operations below the Company Action Level (“CAL”)<sup>47</sup> of RBC.<sup>48</sup>
- The indicated \$530 million increase in capital for the Runoff Companies based on the status quo (shown in Table IV-3) is within the range of these comparative transactions.

50. Table V-3 shows the Table V-1 information in a graphical format.

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<sup>46</sup> Cumulative Log, Document 080 (TW Stochastic Report, p. 6).

<sup>47</sup> CAL = 200% of the ACL. If an insurer’s TAC falls below the CAL, the insurer must submit a plan to the commissioner that discusses what caused the CAL event, and how the event will be cured. (Risk-Based Capital (RBC) For Insurers Model Act, January 2012, p. 312-4.)

<sup>48</sup> The following companies, which all had TAC/ACL ratios of 2.0 or less (below the CAL) after the acquisition reflected in Table V-1, similarly had TAC/ACL ratios at or below 2.0 in the year preceding the acquisition:

- R&Q Reinsurance Company – TAC/ACL of 1.0 in 2005.
- Excalibur Reinsurance Corporation – TAC/ACL of 2.0 in 2008
- Seaton Insurance Company – TAC/ACL of 0.8 in 2007.
- Century Indemnity Company – TAC/ACL of 0.9 in 1998.
- Arrowood Indemnity Company – TAC/ACL of 1.9 in 2006.

Source: The Annual Statement, Five – Year Historical Data schedule (p. 17), for the year preceding the transaction for each company.

**Table V-1<sup>49</sup>**  
*Comparative Runoff Transactions*

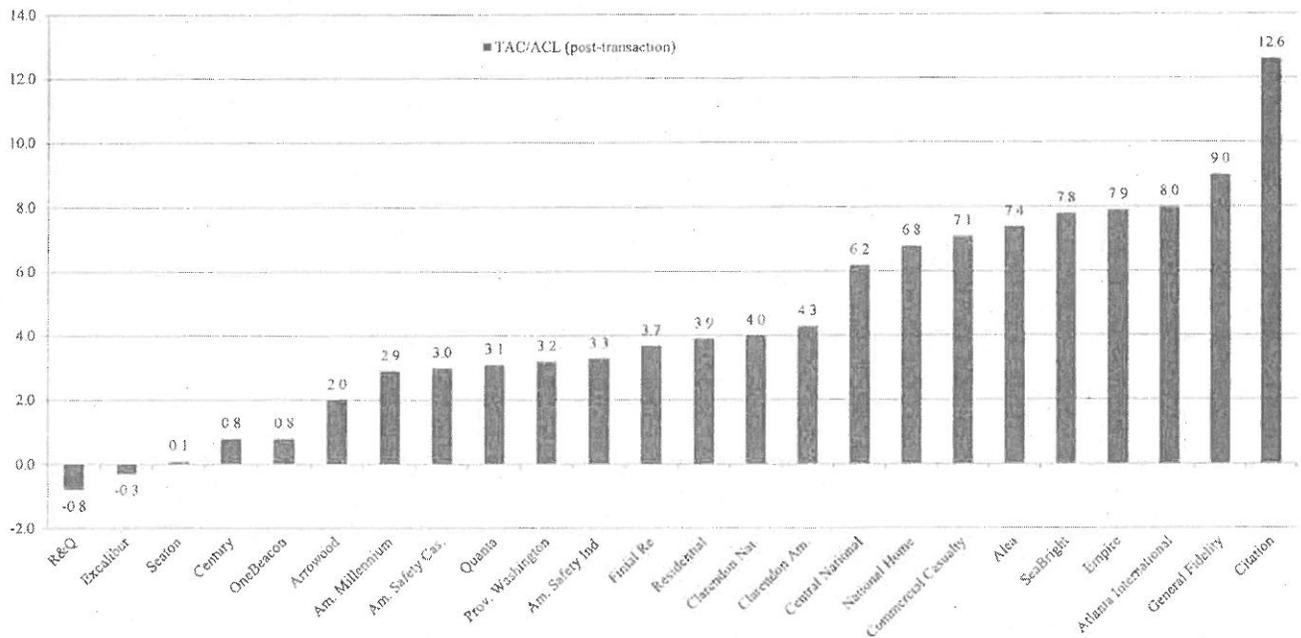
Company	Acquirer	Transaction Year	ACL (in millions)	TAC/ACL (post-transaction)
R&Q Reinsurance Company (formerly ACE American Reinsurance Company) ("R&Q")	Randal & Quilter Investment Holdings Ltd.	2006	\$61.0	-0.8
Excalibur Reinsurance Corporation (formerly PMA Capital Insurance Company) ("Excalibur")	Armour Reinsurance Group Holdings Ltd.	2009	\$24.7	-0.3
Seaton Insurance Company ("Seaton")	Enstar	2008	\$33.4	0.1
Century Indemnity Company ("Century")	ACE Limited	1999	\$343.1	0.8
OneBeacon	Armour	2014	\$161.0	0.8
Arrowood Indemnity Company (formerly Royal Indemnity Company) ("Arrowood")	Arrowpoint Capital Corp.	2007	\$221.3	2.0
American Millennium Insurance Company ("Am. Millennium")	Citadel Reinsurance Company Ltd.	2011	\$1.1	2.9
American Safety Casualty Insurance Company ("Am. Safety Cas.")	Fairfax Financial Holdings Ltd.	2013	\$41.5	3.0
Quanta Indemnity Company ("Quanta")	Catalina	2008	\$16.7	3.1
Providence Washington Insurance Company ("Prov. Washington")	Enstar	2010	\$10.5	3.2
American Safety Indemnity Company ("Am. Safety Ind.")	Fairfax Financial	2013	\$29.4	3.3
Finial Reinsurance Company (formerly Convergium Re Inc.) ("Finial Re")	NICO	2006	\$102.4	3.7
Residential Insurance Company ("Residential")	Catalina Holdings	2011	\$0.2	3.9
Clarendon National Insurance Company ("Clarendon Nat.")	Enstar	2011	\$62.4	4.0
Clarendon America Insurance Company ("Clarendon Am.")	Enstar	2011	\$26.6	4.3
Central National Insurance Company of Omaha ("Central National.")	White Mountains Solutions	2010	\$2.4	6.2
National Home Insurance Company ("National Home")	Catalina Echo Ltd.	2011	\$2.7	6.8
Commercial Casualty Insurance Company ("Commercial Casualty")	White Mountains Solutions	2008	\$9.4	7.1
Alea North America Insurance Company ("Alea")	Catalina Holdings	2009	\$13.5	7.4
SeaBright Insurance Company ("SeaBright")	Enstar	2013	\$29.0	7.8
Empire Insurance Company ("Empire")	White Mountains Solutions Holdings Inc.	2013	\$1.4	7.9
Atlanta International Insurance Company ("Atlanta International")	NICO	2009	\$3.1	8.0
General Fidelity Insurance Company ("General Fidelity")	TIG Insurance	2010	\$31.1	9.0
Citation Insurance Company ("Citation")	White Mountains Solutions	2012	\$8.2	12.6

<sup>49</sup> The Annual Statement, Five – Year Historical Data schedule (p. 17), for the year of the transaction for each company.

**Table V-2<sup>50</sup>**  
*For Transactions with TAC/ACL > 2.0*

Statistic	TAC/ACL	TAC Implied for Runoff Companies <sup>51</sup> (in millions)	
		Total TAC	Additional TAC
Minimum	2.9	\$467	\$337
Weighted Average	4.8	\$773	\$643
Median	5.3	\$853	\$723
Maximum	12.6	\$2,029	\$1,899

**Table V-3**  
*TAC/ACL Ratios*



<sup>50</sup> As mentioned in Footnote 48, I observe that each company in Table V-1 with a post-transaction TAC/ACL ratio at or below 2.0 (i.e., at or below the CAL), already had a TAC/ACL ratio at or below 2.0 prior to the transaction. Since I have not seen any reason expressed in the public record for the Proposed Transaction as to why the PID would allow OBIG to create a company in that condition, my analysis is based on those companies with a post-transaction TAC/ACL ratio of 2.0 or higher.

<sup>51</sup> Total TAC implied for the Runoff Companies is calculated as the TAC/ACL ratio, multiplied by my estimate of ACL at June 30, 2014 of \$161 million, as shown in Table IV-3. Additional TAC implied for the Runoff Companies is calculated as the Total TAC, less the post-Proposed Transaction Runoff Companies' capital of \$130 million, as shown in Table IV-3.

**Conclusion 2:**

Compared to other runoff transactions, the Proposed Transaction is among the most poorly capitalized and therefore the most risky to the Runoff Companies policyholders.

The \$530 million increase in capital indicated based on the status quo is within the range of these comparative transactions.

## VI. TIME TO IMPAIRMENT

51. In Table 1 of the TW Stochastic Report,<sup>52</sup> TW acknowledges that the timing outlined in the table relates to the point in time that assets are fully depleted by claim payments. This is akin to the point in time when checks issued by the Runoff Companies could not be issued because there were insufficient funds to cover those checks.
52. Timely full payment of claims and other company obligations will have ceased long before that time. The latest date at which timely full payment for claims and other obligations would occur would be when the Runoff Companies recognize that they would not have sufficient funds to pay all anticipated obligations, or Technical Insolvency.

### A. BALANCE SHEET FORECASTS AND TIMING FOR LIABILITIES ARE PRACTICAL AND USEFUL

53. TW acknowledges that they did not prepare the balance sheet projections needed to determine the Runoff Companies' liabilities at each year-end of the projection period. As such, TW did not prepare estimates of the point in time at which the Runoff Companies would be in Technical Insolvency or impaired due to inadequate capital.
54. TW explains the absence of balance sheet projections as follows:
  - In the TW Stochastic Report, TW indicated that they “. . . have not been asked to forecast future income statements and balance sheets.”<sup>53</sup>
  - In the TW Reply, TW explained that the frequency and timing of Technical Insolvency “. . . would by necessity involve assumptions as to how the management of the run-off company would set reserves for the business many years into the future (in 10,000 different potential scenarios).”<sup>54</sup>
  - TW added, the “question posed by the . . . [PID was] how likely it is for the assets to be sufficient to run off the claims and liabilities associated expenses.”<sup>55</sup>
55. Despite TW's explanations:
  - TW does not say that balance sheet projections are not practical.
  - TW does not say that such information is not useful.
  - It is likely that TW has prepared balance sheet projections for asbestos liabilities for other clients.
56. In my work as Independent Expert for the Equitas Business Transfer in 2009, I modeled the timing of recognition of the point in time for Technical Insolvencies. I found that the

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<sup>52</sup> Cumulative Log, Document 080 (TW Stochastic Report, p. 5).

<sup>53</sup> Cumulative Log, Document 080 (TW Stochastic Report, p. 10).

<sup>54</sup> Cumulative Log, Document 108 (TW Reply, p. 2).

<sup>55</sup> Cumulative Log, Document 108 (TW Reply, p. 2).

average insolvency would be recognized **eight years** after the date of the transaction.<sup>56</sup> Given the nature of the Equitas Business and the Runoff Companies' business, I believe it is more reasonable to conclude that the likely timeframe for recognition of Technical Insolvency for the Runoff Companies is eight years, not 20-30 years.<sup>57</sup>

#### B. EFFECT OF TIMING ON THE INTERPRETATION OF IMPAIRMENT

57. For some purposes it is useful to interpret impairment in the context of timeframe. For example:

A bond with an estimated default rate of 10% over eight years is more risky than a bond with an estimated 10% default rate over 20-30 years.

Therefore, if impairment is being interpreted in the context of timeframe, it is critical to understand that the period for default (when obligations would no longer be met on a timely basis) is the date when the default is recognized, not the date when cash is exhausted. I discuss this issue further in Section VII where I explain why the 12% Payment Failure Rate is a high failure rate.

#### C. SIGNIFICANCE OF TECHNICAL SOLVENCY AND THE TIMING OF IMPAIRMENT<sup>58</sup>

58. The point in time at which the insurer's assets are not considered sufficient to allow timely payment of claims can be evaluated in three ways:

- When the insurer runs out of assets. This is the point when there is "no money left in the bank." This is called "Failure" in the TW Stochastic Report, and perhaps better called "Payment Failure;"
- When the insurer (and/or its regulator) estimates that its liabilities exceed its assets. This is commonly called "Technical Insolvency;" and,
- When the insurer has assets greater than its liabilities, but the margin, i.e., its capital, is lower than the regulator believes appropriate for business as usual. This is referred to as "Inadequate Capital."

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<sup>56</sup> Average insolvency is 2017 for a transaction in 2009. Equitas Independent Expert Report, p. 103, available at <https://www.equitas-partvii.co.uk/Equitas-IndependentExpertsReport.pdf>.

<sup>57</sup> Both Equitas and the Runoff Companies have substantial US direct asbestos and pollution and assumed reinsurance asbestos and pollution exposures, but Equitas also has longer-duration UK employers' liability asbestos exposures. Equitas had a lower expected impairment rate, about 4%, so at that time the impairment might be expected to be longer than for the Runoff Companies. There may be differences between the Runoff Companies and Equitas that make the expected timing for the Runoff Companies longer or shorter than eight years. Regardless of details, the time to Technical Insolvency is much less than the time to Payment Failure, as defined above in ¶ 58.

<sup>58</sup> I use the term "impairment" and "impairment Rate" to refer to all the circumstances which would lead to the Runoff Companies being unable to make timely payment of their obligations to policyholders, claimants or others. This definition is broader than the TW definition of Payment Failure. (Cumulative Log, Document 080 (TW Stochastic Report, p. 4.)

59. At the Hearing, Mr. Johnson states:

Just to point out that the risk based capital will allow those companies in runoff to be in mandatory control level, meaning they can go down to **a dollar of capital under the supervision** of the Insurance Department and still maintain its runoff status (emphasis added).<sup>59</sup>

60. In my experience, and consistent with Mr. Johnson's statements at the Hearing, the significance of those three points in time is as follows:<sup>60</sup>

- A company that is Technically Insolvent would not be allowed to make payments on a timely basis, as it would no longer have even "a dollar of capital."
- When there is Inadequate Capital the insurance department would more closely supervise the company. Mr. Johnson referred to Mandatory Control Level,<sup>61</sup> but CAL or ACL might represent the intervention point for supervisory activities in other circumstances.
- Not discussed by Mr. Johnson, but in my experience, before the company entered runoff, the question of providing additional capital would be raised by regulators once the company had Inadequate Capital.

61. The PID has discretion to allow companies to operate if capital is below minimum RBC standards. However, I do not believe that the PID has discretion to, or would want to, to allow a company to pay claims in the normal course if its liabilities exceed assets.

62. These different aspects of timing are not recognized in OBIG statements such as the following made by Paul McDonough, Chief Financial Officer ("CFO") of OBIG:

We submit that assuming the transaction is not approved, whether OneBeacon will have the resources or the intention to add additional capital to a runoff subsidiary **20 or 30 years** from now provides less certainty to policyholders than the certainty provided by the significant asset transfer and the dedicated management provided for in the proposed transaction.<sup>62</sup>

63. OBIG's statement above refers to TW's estimate of timing for Payment Failure. A better estimate of the timing for Technical Insolvency is eight years, and the timing for Inadequate Capital is even sooner. Thus, the question of providing additional capital is not a question well into the future, but rather would be raised no later than the point of

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<sup>59</sup> Cumulative Log, Document 105 (Hearing Transcript, 107:17-107:22).

<sup>60</sup> I acknowledge that my understanding of how the PID would treat Technical Insolvency and Inadequate Capital for a company in runoff or not yet in runoff is based on my experience, education, and the discussion of the issue at the Hearing. I do not have the benefit of any discussions with the PID regarding their approach, if different.

<sup>61</sup> If an insurer's TAC falls below the Mandatory Control Level, "the commissioner shall take such actions as are necessary to place the insurer under regulatory control." (Risk-Based Capital (RBC) For Insurers Model Act, January 2012, p. 312-9.)

<sup>62</sup> Cumulative Log, Document 105 (Hearing Transcript, 208:8-208:15).

Technical Insolvency, within **eight years**, and possibly earlier based on declining capital levels.

64. Mr. McDonough continues:

In addition, the current OneBeacon management team is not likely to be in place 20 years from now. My point is that even with no transaction, there is simply no guarantee of solvency indefinitely, or in this case, over a 20 to 30-year period or to ultimately a 70-year period that takes us to the ultimate resolution of the claims, as the risk factors in the 10K of every public property casualty insurance company very clearly spells out.<sup>63</sup>

65. Again, the time frame for Technical Insolvency is eight years, not 20-30 years, or ultimately 70 years. I expect the current management team does expect to be in place, on average, for eight years or more. In this regard, at the Hearing I referred to Table 1 of the TW Stochastic Report as “illusory” in that the timing of Payment Failure shown does not represent the timing of Technical Insolvency or Inadequate Capital. Yet, TW’s estimation of Payment Timing has been interpreted to mean that all financial problems arising after the Proposed Transaction and key decisions arising those problems are decades in the future. That is the illusion.

**Conclusion 3:**

OBIG has used the TW Stochastic Report to assert that there is no reason to believe that additional capital might be required, or that timely payment to the Runoff Companies policyholders would be at risk for the next 20-30 years.

That is not correct in that the TW Stochastic Report has no view on when claim payments might be interrupted by Technical Insolvency. Further, based on my experience as the Independent Expert for the Equitas Business Transfer, I believe that if TW had estimated the time until Technical Insolvency, the time likely would have been **eight** years, rather than 20-30 years, and therefore much more risky than presented.

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<sup>63</sup> Cumulative Log, Document 105 (Hearing Transcript, 208:24-209:7).

## VII. A 12% PAYMENT FAILURE RATE IS A HIGH FAILURE RATE

66. The TW Stochastic Report indicates that the Proposed Transaction has a 12% Payment Failure Rate. TW states that it expresses no view on whether that is “safe enough”:

We [TW] have not been engaged, nor are we necessarily qualified, to render such an opinion [regarding whether the observed success rates are acceptable or desirable] which we regard as being within the purview of the regulators.<sup>64</sup>

67. In its review of the TW Stochastic Report, RRC states:

Overall, we concur that the Runoff Companies are likely to meet their obligations even when under considerable stress.<sup>65</sup>

68. In concurring, presumably with TW, regarding the ability of the Runoff Companies to meet their obligations, I interpret RRC’s reference to considerable stress as being the 88% success rate determined by TW,<sup>66</sup> or the 12% Payment Failure Rate.<sup>67</sup> Thus, I understand that:<sup>68</sup>

- The RRC statement is a repetition of the TW finding and not a separate conclusion.
- The RRC Stochastic Report also does not express the opinion that the Proposed Transaction is “safe enough.”

69. The “considerable stress” test for Financial Capacity is not a standard that I have seen used in capital adequacy testing financial analysis by TW.

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<sup>64</sup> Cumulative Log, Document 108 (TW Reply, p. 2).

<sup>65</sup> Cumulative Log, Document 083 (RRC Stochastic Report, p. 16). The CONCLUSION section says, in full: “We find that Towers Watson did a thorough and professional job in estimating One Beacon’s liabilities and in stressing the payment patterns and inflation assumptions. However, we caution that considerable uncertainty exists both with respect to the ultimate cost of these liabilities, and to the ability of the assets to perform as needed. A & E liabilities may have a particularly wide range of reasonable estimates due to greater uncertainty. The Towers Stochastic Model Report (or the companion Reserve Report) is not expected to contemplate all potential adverse or positive outcomes. We observe that the final version of the pro forma balance sheet as of June 30, 2014, with a smaller equity allocation and an overall a greater capital base, has appropriately shifted some of the risk of failure from poor equity performance to adverse loss development. Overall, we concur that the Run-off Companies are likely to meet their obligations even when under considerable stress.”

In the same document, p. 3, the Executive Summary says:

“With respect to the key question, ‘Will the transferred company contain sufficient assets and sufficient liquidity to pay out on a timely basis all amounts due to policyholders and claimants?’, it appears that the Run-off Companies would be able to meet their collective obligations under most scenarios, including many of the significantly stressed scenarios. However, there are significant risks, some contemplated in the stochastic modeling and some not contemplated, that could result in the exhaustion of the Run-off Companies’ assets before all claims were paid.”

<sup>66</sup> Cumulative Log, Document 080 (TW Stochastic Report, Table 1, p. 5).

<sup>67</sup> Insurers are expected to be able to pay their claims when under considerable stress. The question is “how considerable?”

<sup>68</sup> Regarding RRC, I acknowledge that RRC may have meant something else, and that I do not know what opinions RRC has provided privately to the PID.

A. EVIDENCE SHOWS THAT 12% IS NOT “SAFE ENOUGH”

i. *“SAFE ENOUGH” OVER WHAT TIMEFRAME*

70. One element of the success/failure rate is the “Time Horizon” over which the safety margin is to be assessed. In some cases the probability of making those payments is expressed as an annual probability, compounded to measure the probability across multiple years.
71. A common view of Time Horizon for US insurance purposes is the risk of failure to pay valid claims from policies written, regardless of the time required to make those payments. This is called a “Runoff Time Horizon.”<sup>69</sup>
72. As I described in Section VI, OBIG appears to argue that a 12% Payment Failure Rate is safe enough, at least in part, because Payment Failure will not occur for many years. Also in Section VI, I explained why timely payment to policyholders would cease long before the time of Payment Failure.
73. In the sub-sections below I show why the 12% Payment Failure Rate indicated in the TW Stochastic Report is worse than any of the standards I have seen used for assessing the future of a healthy insurer.<sup>70</sup>

ii. *RBC EVIDENCE*

74. Calibration of RBC provides some guidance on reasonable safety levels. The RBC CAL risk elements of RBC are calibrated to approximately a 12.5% underwriting risk.<sup>71</sup>
75. A company operating at the CAL or ACL requires specific insurance department approval to continue business as usual. Most companies operate with TAC well in excess of ACL. Over 90% have TAC that is at least 2.5 times CAL (equal to five times ACL); over 75% have TAC that is in excess of five times CAL (equal to ten times ACL).<sup>72</sup> The companies with TAC in excess of CAL therefore operate with a failure risk much lower risk than 12.5%.

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<sup>69</sup> The alternative is called a “One-Year” time horizon. That would measure the ability of the insurer to cover claims paid plus changes in claim reserves over the course of a year and still have enough assets to cover future claims and enough margin to sell the expected losses to another insurer. That time horizon does not appear to be applicable for this case. RBC, for example, is based on the full runoff of loss reserves, regardless of the time frame.

<sup>70</sup> The PID is not required to base its decisions on the A.M. Best, S&P or European impairment rate information I present in the following sections. I present this information as I believe it relevant, particularly as the PID has not expressed an impairment rate standard.

<sup>71</sup> An Update to P/C Risk-Based Capital Underwriting Factors: September 2007 Report to the National Association of Insurance Commissioners P/C Risk-Based Capital Working Group, American Academy of Actuaries’ P/C Risk-Based Capital Committee, p. 6.

<sup>72</sup> Of 2,707 companies that filed annual statements in 2013, 2,461, or 91%, had TAC that is at least 250%, or 2.5 times, of CAL. 2,063 companies, or 76% had TAC that is at least 500%, or five times, of CAL. (Summary: Aggregate P/C RBC Results By Year, 2013 Data as of May 22, 2014, available at [http://www.naic.org/documents/research\\_stats\\_rbc\\_results\\_pc.pdf](http://www.naic.org/documents/research_stats_rbc_results_pc.pdf).)

76. It is important to note that the RBC standard does not depend on the time to Technical Insolvency. The RBC standard is the probability of full payment of claims regardless of the payment period, consistent with the runoff nature of the TW 12% Payment Failure Rate.

*iii. A.M. BEST EVIDENCE*

77. For some purposes A.M. Best presents the implications of its financial strength ratings on the basis of implied impairment rates over various time periods. For example, in a special report, A.M. Best shows Best's Cumulative Average Impairment Rates by rating over various time periods.<sup>73</sup>
78. If the 12% Payment Failure Rate included all A.M. Best impairment circumstances, then eight years after the Proposed Transaction the Runoff Companies would be rated between a B+ (lowest of the secure grades) and B (first of the vulnerable grades) by A.M. Best.<sup>74</sup> This would put the Runoff Companies in the 3%<sup>75</sup> least secure of all companies rated by A.M. Best.
79. A.M. Best impairment rates, however, include more than the Payment Failures identified by the TW Stochastic Report. Therefore the Runoff Companies' quality is worse than indicated in the paragraph above.<sup>76</sup>

*iv. OTHER INSURANCE INDUSTRY EVIDENCE*

80. TW's estimated Payment Failure Rate of 12% can also be compared to the following:
- A 12% Payment Failure Rate expected in eight years would result in an S&P rating of BB, or below investment grade.<sup>77</sup>
  - Outside the US, statistical benchmarks are more frequently used. I believe the objectives and business context are similar enough to the US to make them relevant as benchmarks in this case. For example:
    - As of 2009 the UK has used a 2.5% failure rate (the complement of the 97.5% FSA-set success rate) for certain purposes for companies already in runoff.<sup>78</sup>

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<sup>73</sup> A.M. Best's Special Report, Best's Impairment Rate and Rating Transition Study 1977-2013, March 31, 2014, Exhibit 2, p. 15.

<sup>74</sup> A.M. Best's Special Report, Best's Impairment Rate and Rating Transition Study 1977-2013, March 31, 2014, Exhibit 2, p. 15.

<sup>75</sup> FTI analysis of the distribution of A.M. Best Ratings for all property and casualty companies as of September 30, 2014, including non-rated entities. (SNL, a subscription-based service.)

<sup>76</sup> An A.M. Best 12% impairment rate might, for illustration, include 9% of companies with assets less than liabilities (insolvency) and 3% of companies with assets greater than liabilities, but with inadequate capital. A company with a 12% chance of insolvency means it has a higher than 12% chance of impairment for reasons of assets less than liabilities plus other factors.

<sup>77</sup> Standard and Poor's Rating Services, Default, Transition, and Recovery: 2013 Annual Global Corporate Default Study and Rating Transitions, March 19, 2014, Table 24, p. 56.

<sup>78</sup> Equitas Independent Expert Report 2009, p. 160, available at <https://www.equitas-partvii.co.uk/Equitas-IndependentExpertsReport.pdf>.

- The European Union sets the standard as a 0.5% failure rate.<sup>79</sup>

v. *FAILURE RATES ACCEPTED BY OBIG*

81. According the A.M. Best Credit Report on OBIG revised on July 16, 2014:

- OBIG purchases catastrophe reinsurance to protect itself for losses for all but 0.4% of events per year,<sup>80</sup> or a 3.2%<sup>81</sup> eight-year failure rate. This 3.2% failure rate that OBIG selects for its own protection can be compared to the 12% Payment Failure Rate it considers appropriate for the Runoff Companies policyholders.<sup>82</sup>
- A.M. Best reports that OBIG “has several risk tolerance objectives, one of which is to maintain capital supportive of the current ‘A’ operating company.”<sup>83</sup> The ‘A’ rating corresponds to an eight year impairment probability of 3.5%,<sup>84</sup> consistent with OBIG’s reinsurance purchasing strategy, but much safer than the 12% Payment Failure Rate TW proposed for the Runoff Companies.

B. SUMMARY—12% IS NOT SAFE ENOUGH

82. In its June 2013 response, OBIG comments:

What is important is whether the approach to capitalization that is mandated by the SPA is adequate to protect the interests of the Commenting Policyholders.<sup>85</sup>

83. In the OBIG Reply, OBIG states:

Under the Towers Watson stochastic model of over 10,000 possible scenarios, “the proposed . . . balance sheet as of June 30, 2014 . . . will be sufficient to cover the future claim and expense obligations of the runoff companies” in the first 15 years in over 99.20% of the scenarios, and over the first 20 years in 95.91% of the total scenarios. Stochastic Report at 5. The extensive modeling demonstrates that over a 30-year period and even over the entire 70-year anticipated runoff period

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<sup>79</sup> EU uses a “one year” test which requires that the company have capital adequate to cover adverse development in one year plus a risk margin sufficient allow a transfer of the risk to another insurer. Equitas Independent Expert Report 2009, p. 160, available at <https://www.equitas-partvii.co.uk/Equitas-IndependentExpertsReport.pdf>.

<sup>80</sup> A.M. Best OBIG Credit Rating Report, revised 7/16/2014, p. 23.

<sup>81</sup> 0.4% failure per year is a 99.6% success per year. The probability of eight successful years is  $0.996^8$ , or .0.968 (a success rate of 96.8%). Thus, the OBIG probability of failure during the eight years is 3.2%.

<sup>82</sup> This 3.2% failure rate considers only that losses will exceed the OBIG reinsurance level. The chance of exceeding the reinsurance level and then triggering a financial failure of OBIG is even lower. Thus OBIG actually seeks a failure rate even lower than 3.2%, compared to the 12% it considers appropriate for Runoff Companies policyholders.

<sup>83</sup> A.M. Best OBIG Credit Rating Report, revised 7/16/2014, p. 9.

<sup>84</sup> A.M. Best’s Special Report, Best’s Impairment Rate and Rating Transition Study 1977-2013, March 31, 2014, Exhibit 2, p. 15.

<sup>85</sup> Cumulative Log, Document 048 (OBIG Response to Substantive Comments, June 2013, p. 8).

following the Transaction, as proposed, there is an extremely high probability of success (emphasis added).<sup>86</sup>

84. As discussed above, a 12% Payment Failure Rate is not a “high probability of success,” let alone not “an extremely high probability of success.” Moreover, the observation that Payment Failure might arise 30 to 70 years in the future is not relevant to policyholders whose payments will be interrupted at a much earlier time of Technical Insolvency.
85. Although the PID has not expressed a target failure rate, the 12% Payment Failure Rate would leave the Runoff Companies policyholders with a company that is reasonably described as “Vulnerable,” “Below Investment Grade,” and among the least secure 3% of insurance companies rated by A.M. Best. Such a Payment Failure Rate does not appear to be consistent with the standard set by OBIG in the OBIG Reply.

**Conclusion 4:**

Based on insurance industry practices and OBIG’s own financial standards, the 12% chance that “invested assets [will] fall to zero [within 30 years] before the last claim is paid,” as indicated by the TW Stochastic Report, does not provide reasonable security that valid claims covered by Colgate’s policies will be paid in full on a timely basis over a 30+ year payment time frame. Moreover, it provides even less security that a Technical Insolvency will not occur over an eight year time frame.

Considering Conclusions 3 and 4, the Proposed Transaction should be rejected based on the findings of the TW Stochastic Report because the 12% Payment Failure Rate is too high and does not protect the interests of the policyholders.

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<sup>86</sup> Cumulative Log, Document 107 (OBIG Reply, pp. 54-55).

## VIII. OTHER UNMEASURED RISKS TO TIMELY PAYMENT

86. TW acknowledges that it did not prepare balance sheet projections. As such the TW projections do not recognize important issues affecting the probability of full payment of valid policyholder claims on a timely basis.
87. It is practical to model balance sheets across various scenarios to consider the important issues including the following:
  - Technical Insolvency and underestimated impairment risk
  - Capital adequacy and minimum capital standards
  - Investment strategy execution risk
  - Loss reserve discounting

### A. TECHNICAL INSOLVENCY AND UNDERESTIMATED IMPAIRMENT RISK

88. The determination of reserves is subject to errors. If a stochastic analysis included a reserve estimation component, as mine did in my analysis of the Equitas transaction, then among the 10,000 scenarios simulated by TW, some would indicate Technical Insolvency even though ultimately the assets would be sufficient to pay claims and other obligations.
89. The TW stochastic model does not allow for all Technical Insolvencies. Therefore the model understates the probability that policyholders will not be paid for valid claims on a timely basis.

### B. CAPITAL ADEQUACY AND MINIMUM CAPITAL STANDARDS

90. The TW stochastic model assumes claims will be paid in the normal course until capital equals zero. In addition, Mr. Johnson explained that the PID has the authority to allow a company to operate until there is only “a dollar of capital” (emphasis added).<sup>87</sup>
91. Mr. Johnson also explained:

Okay. Well, I think --- just a couple of points to clear the record always. One is, just so everybody's aware of --- I think you are but it never comes out here --- Potomac's already in an action level today. So just remember, again, my points that the RBC level does given the commissioner flexibility and runoff companies that are property and casualty to be in mandatory control level if it's under the supervision of the insurance commissioner. And Potomac's already in an action level, so it's not like this is like newsworthy.<sup>88</sup>

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<sup>87</sup> Cumulative Log, Document 105 (Hearing Transcript, 107:19-107:20).

<sup>88</sup> Cumulative Log, Document 105 (Hearing Transcript, 190:17-191:2).

92. However, even with a target of \$0 in assets, some surplus in addition \$1 is required merely for operating purposes, as investments can take time to liquidate, there are funds held in deposits that can only be used for specific purposes, and there may be regulatory requirements regarding minimum capital.

C. INVESTMENT STRATEGY EXECUTION RISK

93. The TW stochastic model assumes an investment strategy with equities and higher risk bonds (BBB). The TW model does not recognize the year-to-year<sup>89</sup> fluctuations in the market value of equities, only the fluctuations that arise at the time assets need to be sold to pay claims or to reallocate among asset classes.
94. Also, there will be circumstances in which that equity strategy might not be practical or allowed. For example, the ability to implement that strategy might be interrupted because of Inadequate Capital or an indicated Technical Insolvency driven by adverse claim developments or extreme financial market conditions.
95. The TW model assumes that the Runoff Companies will buy equities when markets are falling in order to maintain their equity share, even if capital in the company at the time is low. If the strategy is interrupted, returns on assets will be lower than forecasted by TW, and the probability that policyholders will be paid in full for valid claims on a timely basis will be decreased.

D. LOSS RESERVE DISCOUNTING

96. The TW model, in effect, evaluates each scenario to determine if (i) initial assets plus (ii) accumulated earnings of assets based on the investment strategy minus (iii) cumulative claims and other payments, is positive when all claims and expenses are paid. The balance will be positive if the initial assets are greater than the present value of the liability and other payments. In TW's model, the effective discount rate is the average return from the investment strategy, including the equity returns which average 8.5% over the first 15 year period.
97. Based on my experience with stochastic modeling, I expect that the TW model output includes scenarios of claim, investment and expense experience which have a positive asset balance ultimately, i.e., the discounted future claim payments are always less than the assets, but at certain forecast times the nominal value of claims would be greater than assets.
98. The TW modeling assumes that for those scenarios the PID will allow the discounting of loss reserves at a rate of return reflecting both fixed income and equity returns. Such an exception to statutory accounting principles,<sup>90</sup> known as a permitted practice, requires

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<sup>89</sup> I am assuming that the TW asset modeling reflects market value of equities when sold, but as TW does not prepare balance sheets, the TW model would not reflect year-to-year fluctuations in market value prior to sale.

<sup>90</sup> "... liabilities shall not be discounted unless authorized for specific types of claims." (Statement of Statutory Accounting Principles No. 55, Unpaid Claims, Losses and Loss Adjustment Expenses, ¶ 10.)

regulatory approval. Without this exception the number of Technical Insolvencies will increase.

99. Even if discounting is permitted, it may come with investment or other restrictions, which reduce the success probability. If the investment strategy is changed to reflect those restrictions, it may adversely affect the success probability.
100. The possibility of investment restrictions in the event that discounting is approved is more than hypothetical. For example, while the PID has allowed Excalibur to discount its loss reserves, it also required Excalibur to invest only in highly rated securities (presumably that means no equities).<sup>91</sup>

E. QUANTIFYING THESE RISKS

101. The issues raised above can be readily addressed within stochastic modeling. However, publicly available data does not allow me to quantify these risks and express the results as a revised impairment rate or additional required capital or reinsurance. Nevertheless, the effect is to increase the risk that claims will not be paid in full on a timely basis.

**Conclusion 5:**

The scope of the TW Stochastic Report did not include preparation of balance sheet projections. Therefore, important issues affecting the Payment Failure are not recognized in TW's stochastic modeling. For example, some of the features not reflected in the TW stochastic modeling that could only increase the Payment Failure Rate are:

- (a) the high rate of return produced by the equity investment strategy will not be achievable in all scenarios;
- (b) there is no allowance for any minimum capital prior to cession of business as usual; and
- (c) there is no allowance for scenarios in which the simulated liability estimate produces a Technical Insolvency but assets would turn out to be adequate to cover the cost of claims.

In addition, in certain scenarios TW presumes PID authorization for special practices that are not discussed by TW, RRC or OBIG. In particular, the TW payment success rate modeling assumes that the PID will permit discounting of the Runoff Companies' loss reserves and that the PID will permit the Runoff Companies to make claim payments in the normal course when capital is as little as \$1 above Technical Insolvency.

Proper consideration of the issues in Conclusion 5 increase the chance that valid policyholder claims will not be paid in full on a timely basis.

<sup>91</sup> December 31, 2013 and 2012 Excalibur Reinsurance Corporation Audited Statutory Financial Statements, p. 23.