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January 9, 2015

Public Utilities Board
120 Torbay Road
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Suite E-210
St. John's, NL A1A 5B2

HAND DELIVERED

**Attention: G. Cheryl Blundon, Director of Corporate Services
and Board Secretary
cblundon@pub.nl.ca**

Dear Ms. Blundon:

**Re: Facility Association
Newfoundland and Labrador
Taxi Rate Filing 2014**

Attached is the electronic copy of Submissions By The Applicant, Facility Association in connection with the above-mentioned rate filing. Paper copies of these submissions will be delivered to the Public Utilities Board's office by hand.

We trust this is satisfactory.

Yours truly,

MARTIN WHALEN HENNEBURY STAMP



Kevin F. Stamp, Q.C.

/cdg

Enclosures

IN THE MATTER OF an Application
by Facility Association for approval
of revised rates to be charged for
Public Vehicles – Taxis and
Limousines Insurance Category

SUBMISSIONS BY THE APPLICANT

FACILITY ASSOCIATION

JANUARY 9, 2015

Martin Whalen Hennebury Stamp
Solicitors on behalf of the Applicant
PO Box 5910, 15 Church Hill
St. John's, NL A1C 5X4
Per: Kevin F. Stamp, Q.C.

TABLE OF CONTENTS

| | |
|---|----|
| THE APPLICATION..... | 3 |
| NOTICE | 3 |
| PRELIMINARY QUESTIONS BY THE CONSULTING ACTUARY | 3 |
| CONSULTING ACTUARY’S REPORT..... | 3 |
| REQUESTS FOR INFORMATION..... | 4 |
| HEARING | 4 |
| SELECTION OF LOSS DEVELOPMENT FACTORS..... | 6 |
| LOSS TREND RATES | 10 |
| CREDIBILITY STANDARD FOR THIRD PARTY LIABILITY | 37 |
| COMPLEMENT OF CREDIBILITY | 39 |
| FACILITY ASSOCIATION NON-INDEMNITY EXPENSES | 45 |
| TERRITORIAL IMPLICATIONS | 46 |
| OWNER/OPERATOR DISCOUNT..... | 47 |
| RATING FOR MORE THAN ONE USE | 48 |
| RETURN ON INVESTMENT (AND THE NOVA SCOTIA COMPARISON) | 48 |
| CONCLUSIONS..... | 50 |

1 **THE APPLICATION**

- 2 1. On 6 March 2014, Facility Association presented a Rate Filing for Public Vehicles
3 – Taxis and Limousines Insurance Category in the Province of Newfoundland and
4 Labrador, assumed to be effective 01 August 2014 for new and renewal business.

5 **NOTICE**

- 6 2. Notice of the Facility Association Application was published in newspapers
7 beginning 26 March 2014 and forwarded directly to policyholders.

8 **INTERVENOR**

- 9 3. Ultimately, the Board of Commissioners of Public Utilities received one intervenor
10 submission from the Consumer Advocate dated 24 July 2014, giving Notice of an
11 intention on the part of the Consumer Advocate to intervene in Facility
12 Association's rate application.

13 **PRELIMINARY QUESTIONS BY THE CONSULTING ACTUARY**

- 14 4. By communication dated 21 March 2014, and 9 April 2014, Facility Association
15 received a series of questions from the Consulting Actuary and on 31 March 2014
16 and 16 April 2014, Facility Association wrote to the Consulting Actuary and
17 provided answers to those questions.

18 **CONSULTING ACTUARY'S REPORT**

- 19 5. On 9 May 2014, the Consulting Actuary filed its report with Robert Byrne, Director
20 of Regulatory and Advisory Services with the Board of Commissioners of Public
21 Utilities. That report was reissued on 16 May 2014 with the Consulting Actuary
22 correcting errors in the earlier version.
- 23 6. On 14 May 2014, Facility Association responded to the Consulting Actuary's
24 Report.

1 **REQUESTS FOR INFORMATION**

2 7. The following requests for information have been filed:

3 (a) CA OW 1 issued 28 August 2014 with subsequent response by the
4 Consulting Actuary [undated].

5 (b) CA FA 1 to CA FA 11 issued 28 August 2014 with subsequent responses by
6 Facility Association of 22 September 2014.

7 (c) PUB FA 1 to PUB FA 16 issued by the Public Utilities Board on August 29,
8 2014 with responses by Facility Association on 22 September 2014.

9 (d) PUB FA 17 to PUB FA 24 issued by the Public Utilities Board on 17 October
10 2014 with responses from Facility Association on 29 October 2014.

11 **HEARING**

12 8. The Hearing commenced on 5 November 2014 with oral presentations by two taxi
13 drivers, one from Corner Brook and one from St. John's. These presenters were
14 not sworn witnesses and no cross-examination was permitted.

15 9. Thereafter, the Public Utilities Board heard from two actuarial consultants, the first,
16 Shawn Doherty, FCAS, FCIA, and the second, Paula Elliott, FCAS, FCIA, a
17 Consulting Actuary with Oliver Wyman.

18 10. Mr. Doherty is the Senior Vice President of Actuarial Services and the Chief
19 Financial Officer of Facility Association. Mr. Doherty confirmed that he relied upon
20 data provided by the Insurance Bureau of Canada and like, the Consulting Actuary
21 in respect to the industry data used, did no independent audit but did examine the
22 data from year to year for the purposes of identifying and reconciling any issues.
23 Both Mr. Doherty and the Consulting Actuary considered the data to be
24 acceptable.

25 11. In Table 1 of its 16 May 2014 report, the Consulting Actuary identified the rate
26 indications presented by Facility Association based upon 0% Cost of Capital and

1 2.8% ROI. In Table 3, the Consulting Actuary noted what it described as the
2 Board Guideline Rate Indications:

| Coverage | Facility Association Indication Rate Changes. 0% Cost of Capital and ROI at 2.8% | Consulting Actuary's Rate Indications |
|--------------------------|--|---|
| TPL | 67.3% | 19.8% |
| Accident Benefits | 294.3% | 125.4% |
| UA | 329.3% | 132.8% |
| Independent Coverages | 73.5% | 21.5% |

3
4 While the Consulting Actuary's indications are described in the report as Board
5 Guidelines Rate Indications, they are not, in fact, Board rates. Rather, they are the
6 Consulting Actuary's attempt to estimate rate indications using the Consulting
7 Actuary's assumptions. These submissions are intended to reveal where those
8 assumptions are inappropriate.

9 Thereafter, the Consulting Actuary identified fourteen of what it considered to be
10 **key assumptions** in Facility Association's Rate Application. Immediately following
11 the identification of the fourteen key assumptions, the Consulting Actuary identified
12 five of those assumptions for the Board's consideration:

- 13 1. Loss Trend Rates.
- 14 2. Health Levy.
- 15 3. Full Credibility Standard for TPL.
- 16 4. Basis of the Complement of Credibility.
- 17 5. Investment Income Provision.

- 18 12. Because Third Party Liability ("TPL") premium represents approximately 93% of
19 Facility Association's total premiums for taxis, the Consulting Actuary then
20 indicated that its findings were largely based on assumptions related to TPL
21 Coverage.

1 13. Given the focus of the Consulting Actuary's Report, Mr. Doherty placed primary
2 emphasis in his direct oral evidence on the five disputed assumptions.

3 **SELECTION OF LOSS DEVELOPMENT FACTORS**

4 14. It should be noted that the Selection of Loss Development Factors by Facility
5 Association (as applied to Facility Association's taxi experience) was referenced by
6 the Consulting Actuary in its 16 May 2014 Report as the third and fourth of what
7 the Consulting Actuary identified as fourteen key Facility Association assumptions.
8 However, the selection of loss development factors as applied to taxi experience
9 was not singled out as one of the five for which the Consulting Actuary would
10 provide detailed commentary for discussion. The "taxi" Loss Development Factors
11 (i.e. Loss Development Factors as applied to the Facility Association's taxi
12 recorded indemnity experience) were not identified as disputed assumptions, and
13 as such, these did not receive special attention in the direct oral evidence of Mr.
14 Doherty, although he did provide a general overview of the process for
15 ascertaining those "taxi" Loss Development Factors.

16 15. With respect to the third key assumption (of the fourteen identified), "*SELECTION*
17 *OF ULTIMATE (Loss Development)*", the Consulting Actuary indicated that it would
18 discuss Facility Association's selected "taxi" Loss Development Factors in the
19 "*Other Considerations*" section of its report.

20 16. In the fourth key assumption (of the fourteen identified), "*SELECTION OF*
21 *ULTIMATE CLAIM COUNTS (Claim Count Development)*", the Consulting Actuary
22 confirmed that the use by Facility Association of Industry Commercial Vehicle Data
23 in the selection of "taxi" Claim Count Development Factors and Facility
24 Association's "taxi" Loss Development Factor selections was reasonable.

25 17. During his direct evidence, Mr. Doherty explained the process adopted by Facility
26 Association in establishing "taxi" Loss Development Factors. His evidence on the
27 point is contained for the most part in the transcript for November 5, 2014 at Pages
28 60-83.

- 1 18. Mr. Doherty testified that the "taxi" Loss Development Factors contained in the rate
2 filing are not exclusively related to taxi experience, rather they utilized the
3 Newfoundland Accident Year basis experience for Facility Association's Non-
4 Private Passenger Vehicles, having observed that taxi experience is a very
5 significant component of the non-private passenger experience, to determine how
6 the claims activity moves from different points in time to ultimate settlement. This
7 movement is captured in the various age to age columns for development periods
8 from 6-12 months out to 204-210 months or beyond.
- 9 19. The process described by Mr. Doherty involved the use of the Link Ratio Method
10 for accident half year data on a coverage level basis summarizing the results in an
11 accident year cohort on a Government Line basis. The Link Ratio Method and the
12 Expected Loss Ratio Method (applied at a Government Line level) would be further
13 compared with the result from the Bornhuetter-Ferguson Method, making a final
14 determination of ultimate from those three methodologies. That determination of
15 ultimate is then compared to recorded activity for every period resulting in the
16 generation of Implied Loss Development Factors.
- 17 20. This same process is applied to each individual coverage for Facility Association's
18 taxi experience, in turn resulting in the ultimate indemnity value for each individual
19 coverage and for combined coverages found in column 6 of Exhibit D1.
- 20 21. As there were no questions put to Mr. Doherty during the hearing process by the
21 Consumer Advocate on the topic of "taxi" Loss Development Factors, Mr.
22 Doherty's evidence on this topic went completely unchallenged by the Consumer
23 Advocate. Cross-examination of Mr. Doherty by Board counsel, Ms. Glynn,
24 touched on "taxi" Loss Development Factors only to a very limited degree. The
25 initial portion of Board counsel's cross-examination on this topic commenced on
26 November 7, at page 105, at line 22, and ended at page 108, line 17.
- 27 22. That portion of Board counsel's cross-examination, however, was not focussed on
28 "taxi" Loss Development Factors which are Facility Association's Appendix "A"
29 factors extrapolated from non-private passenger experience and of which, as Mr.

1 Doherty testified, about two-thirds was made up of taxis. Rather, the focus of that
2 portion of the cross-examination was on Facility Associations *Appendix "B"*
3 *"Commercial Vehicle"* Loss Development Factors pulled from Industry Commercial
4 Vehicle data for trend analysis. More will be said on the Appendix "B" Loss Cost
5 Projection Factors in the section of these submissions dealing with "**Loss Trend**
6 **Rates**".

7 23. It should be noted that the Appendix "A" *"taxi"* Loss Development Factor
8 discussion dealt with in this portion of the submissions, are those factors
9 referenced by the Consulting Actuary in the third bullet of its 16 May 2014 report at
10 page 6, where it is specifically acknowledged that Facility Association relies upon
11 its Non-Private Passenger Vehicle, Newfoundland experience in selecting such
12 development factors. Those *"taxi"* Loss Development Factors applicable to Facility
13 Associations taxi experience in Newfoundland are contained in column 5 of Exhibit
14 D-1, and are to be distinguished from Loss Cost Projection Factors contained in
15 column 15 of Exhibit D-1.

16 24. Later in her cross-examination of Mr. Doherty, starting on November 7 at page 113
17 and ending at page 114, Board counsel focussed briefly on Facility Association's
18 Appendix "A" Loss Development Factors for taxi experience and essentially put
19 only two questions to Mr. Doherty. In the first question she asked what vehicles
20 were included in the Non-Private Passenger Vehicle data. The second question
21 she asked was whether Mr. Doherty could say if the factors for taxis are
22 developing the same as they would for Non-Private Passenger Vehicles. Mr.
23 Doherty responded to the second question indicating that he was satisfied that this
24 was a fair assessment given that probably two-thirds of the actual claims that are
25 in that data set (meaning Non-Private Passenger Vehicles) are taxis. Mr. Doherty
26 was not challenged on this opinion. Thereafter, at page 114 Board counsel moved
27 back to a discussion on trend rates.

28 25. Returning to the 16 May 2014 Consulting Actuary's Report, and to the "**Other**
29 **Considerations**" section commencing at page 20 thereof, the Consulting Actuary
30 repeated its acknowledgement that, due to data limitations associated with the

1 small number of taxis, there was a degree of uncertainty in the rate level
2 indications. The Consulting Actuary went on at the top of page 21 of the report to
3 suggest that selecting “taxi” Loss Developing Factors based on Non-Private
4 Passenger Vehicle experience added to the uncertainty.

5 26. The claim, on the one hand, by the Consulting Actuary of added uncertainty
6 associated with the development of rate indications due to data limitations for taxi
7 experience only, and the suggestion, on the other hand, that the substitution of the
8 Non-Private Passenger Vehicle experience cohort, being a broader database (but
9 including taxi experience) adds to the uncertainty, seems inconsistent and counter-
10 intuitive. That is, to avoid any “*added uncertainty*” caused by using the broader
11 based Non-Private Passenger data in selecting taxi Loss Development Factors,
12 one would use taxi experience alone. However, this approach would simply add
13 different uncertainty because of the acknowledged limitations in the taxi
14 experience as described by the Consulting Actuary. Importantly, the Consulting
15 Actuary did not indicate that the use of Non-Private Passenger data for
16 determining “taxi” Loss Development Factors was unreasonable or inherently
17 “biased”, nor did the Consulting Actuary provide any measure of the “*additional*
18 *uncertainty*”, if any.

19 27. It is also noteworthy that in the 16 May 2014 Report the Consulting Actuary offered
20 no suggestion for use of alternate data experience for the purpose of generating
21 Loss Development Factors. Similarly, during her oral evidence at the hearing, the
22 Consulting Actuary’s Principal gave no suggestion for use of alternate data
23 experience for purposes of selection of Loss Development Factors to be applied
24 for the development of taxi experience.

25 28. In summary, there is no evidence to suggest that:

- 26 a. the Loss Development Factors used in Facility Association’s rate indication are
27 unreasonable;

1 b. using taxi data alone as the basis for loss development factor selection would
2 reduce the overall level of uncertainty of Facility Association's rate indication;
3 and

4 c. there is an available data set that would provide more suitable Loss
5 Development Factors.

6 **LOSS TREND RATES**

7 29. It appears to be conceded that the issue of Loss Trend Rates accounts for the
8 greatest variation in the indicated rates developed by Facility Association and
9 those suggested by the Consulting Actuary.

10 30. The Consulting Actuary in its 16 May 2014 Report advocated the adoption of
11 Commercial Vehicle (CV) Loss Cost Trend Rates as generated by the Consulting
12 Actuary in its earlier report "*Newfoundland & Labrador, Commercial Vehicles,*
13 *Oliver Wyman Selected Loss Trend Rates Based on Industry Data* through
14 December 31, 2012. The Consulting Actuary went on in the 16 May 2014 Report
15 to state that its rationale and selections for CV trend rates based on NL Industry
16 CV data, some one and one-half years earlier; at December 31, 2012, continued to
17 be reasonable as at 16 May 2014.

18 31. The issue for consideration by the Board, therefore, is the extent to which the
19 Facility Association's Loss Cost Trend Rates or those of the Consulting Actuary
20 are representative of Facility Association taxi experience in Newfoundland and
21 Labrador. To this end, it is important to bear in mind the purpose of the loss trend
22 rates in deriving rate indications. In Oliver Wyman's December 31, 2012 Trend
23 Report, this purpose is described on the initial page:

24 *"They are applied to the experience period incurred losses to adjust for the cost*
25 *levels that are anticipated during the policy period covered under the proposed*
26 *rate program."*

27 The Report continues:

1 *"The data in the experience period under consideration must be adjusted to*
2 *reflect changes in the cost conditions that have taken place (i.e. "past trend"),*
3 *and then the data must be further adjusted to reflect changes in cost conditions*
4 *that are expected to take place between the present time and the time during*
5 *which the new premiums will be in effect (i.e., "future trend")."*

6 The Report concludes:

7 *"Therefore, **past trend rates should reflect the underlying patterns that***
8 ***occurred during the experience period, ..."** [emphasis added]*

9 This commentary applies to the Facility Association's taxi rate filing. Facility
10 Association fully agrees with the above comments. In the Board's deliberation, it
11 must determine which of the two sets of proposed past trends best "**reflect the**
12 **underlying patterns that occurred during the experience period**".

- 13 32. In this particular context, the experience to be considered and adjusted is Facility
14 Association's taxi experience. The focus of the discussion during the hearing was
15 on TPL, as it constitutes, by far, the largest component of the overall taxi claims
16 costs. In its application, in responses to questions etc. with respect to that
17 application and reiterated in testimony, Facility Association showed that its
18 selected past trends do indeed reflect the underlying patterns that occurred during
19 the experience period with respect to taxis. In contrast, the Consulting Actuary's
20 testimony concedes that the Consulting Actuary's trend rates do not. This is clear
21 in testimony provided on November 18, particularly on page 120 where the
22 Consulting Actuary testified:

23 *"So perhaps the more recent information that we see, limited as it is, is that the*
24 *costs are not continuing to **increase as they have as** - - you know, which is*
25 *evident here with the taxi experience that it's flattening out."* [emphasis added]

26 Continuing on to page 121 in response to Ms. Newbury's question:

27 *"You didn't talk about, oh, in the last couple of years may there's a flattening out.*
28 *You've talked about a continual year-after-year downward trend since 2004."*

1 The Consulting Actuary agreed, then continued:

2 “- - we’re talking about commercial experience. ... You’re presenting here the
3 experience for taxis, and if you’re asking me can we establish a trend rate for a
4 TPL, I can only say that FA chose not to do so because it found the experience
5 was too limited to set a trend rate. **I’m only stating that in the more recent**
6 **years it appears to be flattening out.**” [emphasis added]

7 Further, on page 125, the Consulting Actuary states:

8 “I’m saying that the commercial vehicle trend rate, our measurement of it, is a
9 negative for bodily injury, minus 1.5 percent. FA has submitted a taxi filing. FA
10 has said, “I can’t use my taxi data to establish a trend rate. I’m going to use
11 commercial data.” We accept that. There’s not a better alternative”.

12 Notwithstanding that Facility Association did not say “I can’t use my data to
13 establish a trend rate” (Facility Association simply uses CV as a proxy for taxi in an
14 effort to manage available resources), the Consulting Actuary ignores in this
15 assessment that the industry CV trends selected by Facility Association **do**
16 describe the changes over the period in the taxi experience, whereas the
17 Consulting Actuary’s selected trends **do not**.

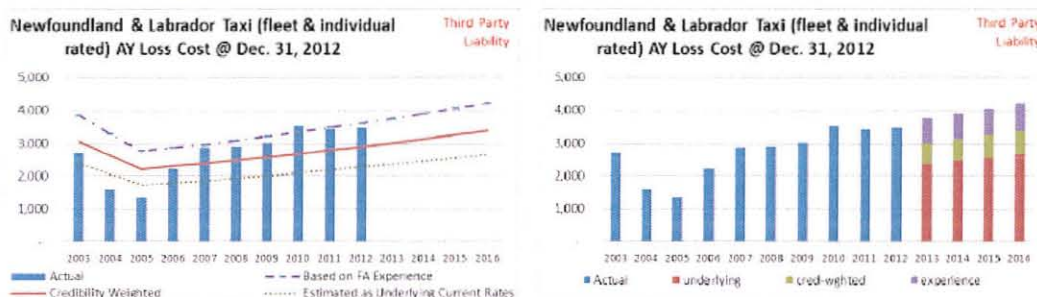
- 18 33. Specifically, it is Facility Association’s opinion that its selected NL Industry CV
19 trends look like the FA NL Taxi experience – in particular, it reflects the taxi
20 experience third party liability loss cost¹. This is visually clear in the attached
21 graph (presented at the hearing) of the Facility Association’s taxi TPL loss costs,
22 where the blue data bars in the attached graph are Facility Association’s actual
23 TPL loss costs for taxis. Those same blue data bars also appear in the graphs set
24 out in paragraph 34. Except that they include only data for 2006 through 2012 in
25 the left side graph and for 2008 through 2012 in the right side graph, the very
26 same blue data bars are also displayed in the graphs in paragraph 38. Facility
27 Association’s Actuary, through statistical regression modelling, sees the blue data

¹ CA FA 7, page 1

bars generally trending upward whereas the Consulting Actuary, based on its mechanical process, diluting changes in trend for the sake of stability, and replacing statistical regression modelling with intuition, sees the same blue data bars generally trending downward. Further, Facility Association's trend selection as represented by the solid red line, recognizes a change at 2004-H2 that accounts for the loss cost decline in taxis between 2003 and 2005, and the subsequent increase in the period from 2005 through 2012.

The Facility Association Trend Rates are reflected in the Red Line in the left side graph.

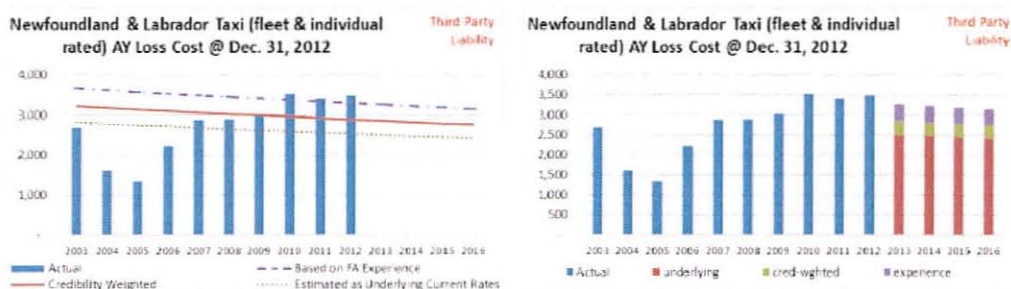
TPL Loss Cost by Accident Year Consistent with 2014 Filing



34. The Consulting Actuary's selected NL Industry CV trends do NOT look like the Facility Association NL Taxi experience. The Consulting Actuary's red line selection for trend sees the blue data bars as reflecting a continuously decreasing pattern in Loss Cost from 2003 through 2012.

The Consulting Actuary's Trend Rate is reflected in the Red Line in the left side graph.

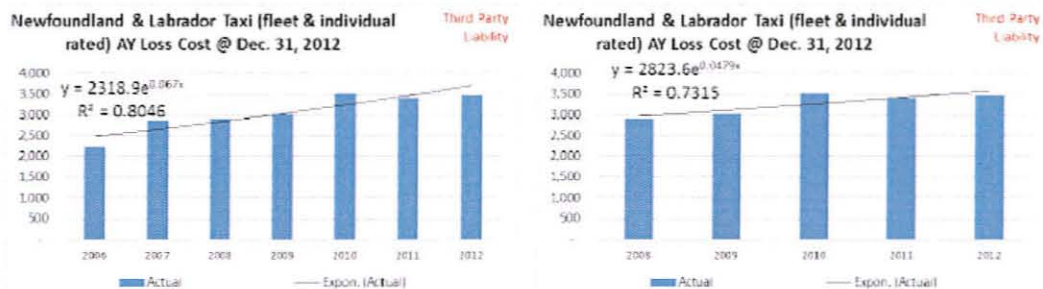
TPL Loss Cost by Accident Year Consistent with PUB CV trends @ Dec 31, 2012



- 1 35. The Consulting Actuary's Principal claims that there has been a decline in loss
2 costs, as evidenced by her testimony and by the trend line placed by Mr. Doherty
3 in each of Exhibits SD#1, SD#2, SD#3 and SD#4 (see Undertaking U-22).
4 Although the Consulting Actuary never produced any graphs with actual fitted lines
5 to the data, in each of those four preliminary regressions, the Consulting Actuary's
6 theory is that the data reveals a declining loss cost trend line commencing with the
7 start date 2003 and continuing through December, 2012.
- 8 36. As noted by Mr. Doherty, those Consulting Actuary's trend lines are not reflective
9 of the trend identified by Mr. Doherty through his regression processes. More will
10 be said on that later. In any event, despite the Consulting Actuary's declining lines
11 from 2003 through 2012, the actual evidence of the Consulting Actuary's Principal
12 during the hearing was to the effect that the decline was actually observed from
13 2010 to 2011, where she noted that taxi loss costs were down by 3%, although
14 back up by approximately 2% from 2011 to 2012. She went on to say that this was
15 a minus one percent or "flattening out" of the taxi loss costs over the "more recent
16 period".
- 17 37. For loss costs to "flatten out" in the more recent period, it seems obvious that loss
18 costs must have been recognized by the Consulting Actuary to have been
19 increasing at least in the period prior to 2010. As mentioned, the Consulting
20 Actuary's Principal admitted this on November 18, (p.120, lines 15-22). There, she
21 testified that "*....in the last three years....the costs are not continuing to increase
22 as they have....*". Notwithstanding this, the Consulting Actuary's fitted and selected
23 trend line is said to have loss cost declining since 2003.
- 24 38. As presented in response to CA FA 6 (page 2) and presented again during the
25 hearing, regression on Facility Association NL Taxi TPL Loss Costs show strong
26 R^2 fits on both seven and five year regressions, and annual trends in both cases
27 being 6.7% and 4.8% respectively higher than Facility Association NL Industry CV

1 TPL selected trend (and clearly not at all similar to the Consulting Actuary's NL
2 Industry CV selected negative TPL trend).²

TPL Loss Cost Trends Estimated from FA NL Taxi Loss Costs @ Dec 31, 2012



3

4 39. Asked in cross-examination to examine the taxi claims data from 2003 to 2012, as
5 depicted in the yearly blue bar data, the Consulting Actuary's Principal, instead of
6 addressing the inconsistencies between the Consulting Actuary's red line trend
7 and the blue bar data experience, attempted to explain the lack of fit on the basis
8 that the Industry Commercial Vehicle data did not include taxis which it claimed,
9 added to the uncertainty. The Consulting Actuary's Principal, in effect, declined to
10 explain why the Consulting Actuary's red trend line in paragraph 34 was so
11 conspicuously inconsistent with the blue bar taxi data. In any event, the
12 suggestion of added uncertainty rings hollow when the Consulting Actuary has
13 already conceded that it used precisely the same experience to develop its trend
14 lines as used by the Facility Association (i.e. industry NL CV) and also conceded
15 that there was no better experience or data that either the Consulting Actuary or
16 Facility Association could use to establish trend rates for this purpose.

17 40. The Consulting Actuary suggested that the taxi experience is not "*credible*", when
18 attempting to explain why her selected trend rates show decreases from 2003 to
19 2012 and yet actual NL taxi ultimate indemnity values have generally been
20 increasing since 2003. However, the concept of "*credibility*" is applied to ascertain
21 whether the trends in a particular data set (i.e. taxi experience) are adequate
22 enough in size to make predictions for the future. Even if the amount of data was

² CA FA 6, page 2 showing FA NL Taxi 7-year loss cost trend @ 6.7%, 5-year loss cost trend @ 4.8%.

1 not considered to be sufficient to be relied upon exclusively to predict the future,
2 this does not detract in any way from the historical measures. We are still left with
3 the incongruous position of the Consulting Actuary claiming not only that it is
4 reasonable to apply the Consulting Actuary's Commercial Vehicle TPL declining
5 trend from 2003 onward to taxi loss costs, when the taxi experience quite clearly
6 demonstrates the opposite to be true, but the equally perplexing position that this
7 is more reasonable than using Facility Association's trend selections which, in
8 contrast, do align with the taxi experience.

9 41. Again, the Board's task, in part, is to determine which of the Facility Association's
10 red line and the Consulting Actuary's red line, as depicted in the preceding graphs,
11 and the regression analysis and goodness of fit of the former and the lack of that
12 analysis and goodness of fit in the latter, best "... *reflect the underlying patterns*
13 *that occurred during the experience period*". That is, to determine which of those
14 red lines is a best fit for the actual blue bar NL taxi experience. While Facility
15 Association believes that this determination or choice should be made on a formal
16 comparison of goodness of fit tests, we would agree that, even to a layman, it is
17 clear in the present case through simple observation, which of the respective red
18 lines in the graphs in paragraphs 33 and 34, when compared with the blue bar
19 data, represents a "*best fit*". The Consulting Actuary's red line in the graph in
20 paragraph 34 seems to ignore, rather than reflect or follow, the blue bar data.

21 42. In each of the graphs included in paragraphs 33, 34 and 38, the blue bar accident
22 year values are, and are conceded by the Consulting Actuary to be, actual Facility
23 Association NL taxi claims experience. Looking at the graph in paragraph 34, the
24 Consulting Actuary's red line is above, and in some cases significantly above, the
25 blue bar accident year taxi data for each of 2003, 2004, 2005, 2006, 2007 and
26 2008. Facility Association, on the other hand, shows a change in trend over the
27 period, from decreasing over 2003 to 2005 (reflecting Facility Association's
28 identified change in loss costs at 2004-H2) to an increasing trend thereafter
29 through 2012.

- 1 43. As previously indicated, for the purposes of determining trend rates, Facility
2 Association utilized NL CV Industry experience. In the very first paragraph of the
3 discussion on Loss Trend Rates, at page 9 of the Consulting Actuary's 16 May
4 2014 Report, the Consulting Actuary confirmed that the use of Industry CV
5 experience was reasonable. This acknowledgement is consistent with the use by
6 the Consulting Actuary of the same Industry CV experience for the development of
7 trend rates as outlined in the Consulting Actuary's December 31, 2012 Trend
8 Report.
- 9 44. Further, during the course of cross-examination of the Consulting Actuary's
10 Principal by Facility Association's counsel, she again acknowledged the
11 appropriateness of the use of Industry CV experience for determining trend rates.
12 She agreed that there was no better alternative to the use of commercial
13 experience to establish trend (November 18, P. 125). As she conceded, "...*there*
14 *really isn't a better choice*" (November 18, P.119).
- 15 45. Given both actuaries start with the same NL Industry CV experience, it begs the
16 question, "How is it possible that they arrive at such very different results?" The
17 answer lies in the fact that the actuaries differ profoundly in the manner in which
18 that experience should be used and the interpretation to be drawn from it. As a
19 result, Facility Association believes that, not only do the Consulting Actuary's
20 trends fail to represent changes in Facility Association's taxi loss costs over time,
21 they also fail to represent the underlying Commercial Vehicle trends.
- 22 46. Mr. Doherty described Facility Association's methodology for identifying a best fit
23 estimate of historical claims frequency and severity. Underlying that methodology
24 was the use of comprehensive statistical regression modelling, looking at various
25 time frames, identifying other parameters (for example, seasonality where it
26 evidenced itself in the regression analysis), and after conducting an array of
27 regression analyses, identifying the best model using various statistical goodness
28 of fit measures. Mr. Doherty testified that he did not begin with any preconceived
29 notions of what to expect, he allowed the data to speak through regression
30 modelling.

- 1 47. In contrast to Mr. Doherty's approach of letting the data speak, the Consulting
2 Actuary made, as she described it, "*an attempt to smooth out the points that are*
3 *included in the regression...*". This evidence was a very telling admission as to the
4 nature of the Consulting Actuary's approach. Further, the Consulting Actuary
5 admits having rejected various regression test analyses performed by Facility
6 Association because such results were not "intuitively reasonable".
- 7 48. The main differences in approach can be thought of in terms of:
- 8 a. how **time periods** for trends are selected;
 - 9 b. consideration of "**stability**" over "**fit**"; and
 - 10 c. consideration of data to be excluded (i.e. **identification of "outliers"**)
- 11 49. With respect to the first difference (i.e. contrasting way that time periods are
12 selected), Mr. Doherty provided evidence that the Facility Association's approach
13 was to look at the data available over the most recent twenty years (as being the
14 longest period of data available) and let that data itself "reveal" time period(s) of
15 consistent trend, through regression modeling and assessment and comparison of
16 statistical measures of fit of the competing models, before finally selecting a final
17 model of trend. In contrast, the Consulting Actuary outlined their approach of
18 focusing on specific and pre-determined period lengths of 10 and 5 years.
- 19 50. In critiquing Facility Association's approach, the Consulting Actuary took significant
20 exception with what she perceived to be Facility Association's selection of a twenty
21 year time period over which trend rate analysis was conducted. Mr. Doherty
22 testified that, while twenty years of data was considered, the resulting analysis
23 revealed a bifurcation of trend over that period (i.e. reflecting a "*change in pattern*"
24 as per the Consulting Actuary's vernacular), where the first "period" ended at 2004-
25 H1 and the second started at 2004-H2, based upon the regression analysis
26 indicating that this would result in a strong and statistically supported trend line fit.
27 Further, as only the most recent 5 years of taxi experience was used in Facility
28 Association's taxi rate level indication, only this latter seven and one-half year

1 trend period was, in fact, directly applicable to the final Facility Association tax rate
2 level indication.

3 51. Unlike the Consulting Actuary, Mr. Doherty did not have any pre-determined time
4 period for assessing the trend (i.e. that only a 10 year period or a 5 year period
5 should be used). Rather, he performed the regression calculations first over the
6 full twenty year period, and then relied upon regression statistics and analysis to
7 help determine where any particular period began and ended. On the basis of the
8 data before him, he determined that the 2004-H2 year represented the
9 commencement of a new trend. As it happens, this change in pattern coincided
10 with the amendments to automobile insurance legislation ("*auto reform*"), most
11 significantly the implementation of a \$2,500 deductible on claims for general non-
12 pecuniary damages. The results of Mr. Doherty's analysis confirmed that a
13 change in trend commenced at this time (i.e. the "pattern" changed), and that this
14 was readily apparent when separately analyzing the regression statistics for
15 frequency and severity. However, Mr. Doherty reiterated throughout his testimony
16 that his selected time frame simply coincided with the timing of the 2004
17 automobile reforms, but importantly was **not** testifying that those reforms **caused**
18 the change in trends.

19 52. It is interesting to note that, while the Consulting Actuary has indicated that using
20 the 10-year period is preferred for Bodily Injury but that a 5-year period is also
21 considered in an effort to identify a potential "change in pattern", there is little
22 evidence that if such a change in pattern is identified, it is acted upon. At best, it
23 appears to be only "partially" acted upon through the "averaging" process which
24 will be discussed with respect to the second major difference, being "stability" over
25 "fit". In striking contrast, where Facility Association has identified a change in
26 pattern, they act upon it directly in the selection of the regression model to use as
27 the basis of their trend selections.

28 53. The Consulting Actuary is particularly critical of Facility Association's actuarial
29 conclusions that auto reform had an impact on coverages such as Accident
30 Benefits, claiming, she said, this was not intuitively reasonable. The Consulting

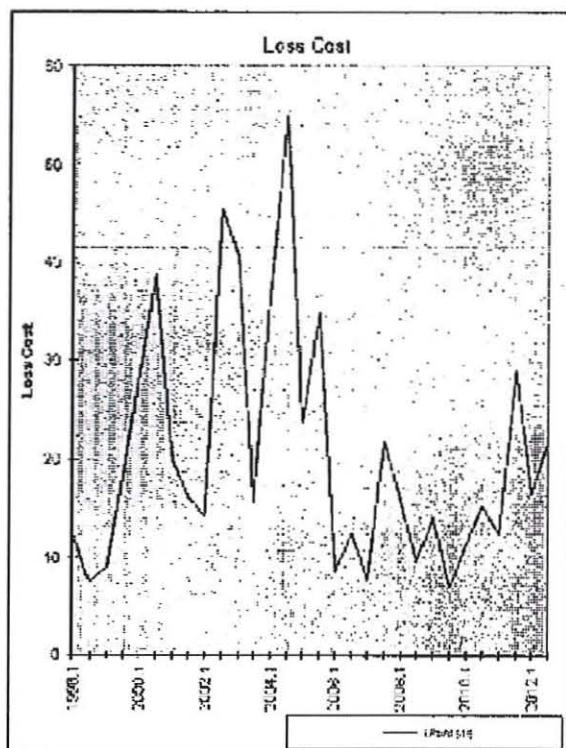
1 Actuary's Principal was adamant that there was no change in Accident Benefits
2 loss cost at 2004-H2, and certainly not in a range of 73% decrease. On 18
3 November the Consulting Actuary's Principal testified (at page 162):

4 *"...I think they need stronger justification that costs have decreased by 37%.*
5 *And I don't mean a P-test or T-test because I still don't – you can have the best*
6 *R-square, P-test, T-test that you want. I don't believe that AB costs reduced by*
7 *73 percent because of some reforms or some other event in the second half of*
8 *2004."*

9 Despite this rigidly held view presented in her evidence during the hearing, the
10 Consulting Actuary's Accident Benefits loss cost graph (copy inserted below)
11 reveals an obvious and dramatic shift in Accident Benefits loss cost after 2004.
12 Again, throughout Mr. Doherty's testimony, he repeatedly confirmed that the result
13 of his analysis determined a bifurcation of trend periods, ***but not that the auto***
14 ***reforms of 2004 necessarily caused the change in trend.*** The Consulting
15 Actuary's insistence that nothing happened after 2004 certainly appears to be
16 rebutted by the Accident Benefits loss cost graph inserted below. Interestingly,
17 during her evidence on 17 November, at page 26, the Consulting Actuary's
18 Principal said:

19 *"... graphically, ... a layman can see what are the high points and the low points,*
20 *you know up and down, up and down".*

21 The very substantial drop in loss cost between 2004 and 2005 as revealed in the
22 attached Consulting Actuary's graph seems very visually evident and yet the
23 Consulting Actuary's Principal claims that she does not see it. Even from cursory
24 observation, the Consulting Actuary's attached graph establishes that loss cost
25 trended upwards, reaching approximately \$55 in 2004-H2, and then dropped
26 significantly to approximately \$35 in 2005-H2, and dropped again in 2006-H2 to
27 approximately \$13, a total decline in excess of 76%. So the Consulting Actuary's
28 own graph reveals what its Principal refused to admit, that is, the decrease in loss
29 cost was actually greater than 73%.



1

2 54. In any event, Facility Association's Actuary, while always considering the
 3 possibility that auto reform might impact trends in claims costs, allowed the
 4 ultimate determination as to whether or not any changes in trend coincided with
 5 auto reform to be based upon what is revealed statistically by the data. In the
 6 present filing, with an additional year of data over the previous filing, and with
 7 separate analyses of frequency and severity, the regression statistics and analysis
 8 have demonstrated quite clearly that indeed a change in the trend occurred
 9 commencing in the year 2004. In the view of the Facility Association, whether this
 10 was directly attributable to the 2004 auto reforms or due to some other phenomena
 11 is not as important as the fact that the change in trend is statistically supported.

12 55. As demonstrated, Facility Association's actuary, in analyzing the data for trend
 13 rates, adopts a scientific and statistically sound approach unlike that relied upon by
 14 the Consulting Actuary, which focuses on predetermined time periods, and, in
 15 challenging Facility Association's selection of the period in which the trend pattern
 16 changed, intuition.

1 56. As is clear throughout the preceding discussion in relation to time period selection,
2 Facility Association's entire trend analysis process is focused on how well various
3 regression models "fit" the historical data, and this then introduces the second
4 major difference in approach. As per the Consulting Actuary's stated position in its
5 16 May 2014 Report, there appears to be agreement, at least in principal, on this
6 issue:

7 *"Both Oliver Wyman and FA apply loss trend regression models to determine the*
8 *loss cost trend rate (the average year to year change in loss costs). **Key***
9 ***considerations in determining the loss cost trend rate include: How well***
10 ***the regression model "fits" (in a statistical sense) the actual historical data,***
11 *the reasonableness of the parameter values included in the regression model,*
12 *the time periods over which the trend is measured and the exclusion of outlying*
13 *data points from the regression model". [emphasis added].*

14 57. From this, it would certainly seem appropriate that for Facility Association to satisfy
15 the Board's filing requirement where it chooses not to use the Board guideline
16 trend rates, the rationale for use of different factors should reasonably be based on
17 comparative measures of "fit". (The Board's Guideline states on page A-4
18 "Companies are not required to use the guideline factors, but full rationale for use
19 of different factors must be provided and supported.") When queried by the
20 Consumer Advocate as to why a "fit" was rejected in favour of intuition, the
21 Consulting Actuary' Principal returned to the erroneous view that it was Facility
22 Association's position that the 2004 reforms caused the change in the trend. The
23 Consulting Actuary failed to offer any explanation as to why Facility Association
24 showed a much more superior regression fit than did the Consulting Actuary's
25 regression models which were partially the basis of her selected trend rates in her
26 December 2012 Report.

27 58. Although having recognized in its 16 May 2014 Report that a **key consideration** in
28 determining loss cost trend rate was how well the regression model fits the
29 historical data, the Consulting Actuary essentially ignores that consideration and
30 abandons regression and goodness of fit measures in favour of a mechanical

1 approach to smoothing out of trend. In reference to her four component trend
2 values for Bodily Injury, the Consulting Actuary actually testified that “...it’s very
3 *difficult to be confident that that (sic) one answer...is right*”. While the Consulting
4 Actuary recognized the lack of confidence in any one of its trend percentages, it
5 appears to conclude that by averaging them they would somehow be improved
6 (although as discussed later, no specific fit measure of the final selected trends are
7 provided). However the Consulting Actuary’s approach might be characterized, it
8 very definitely does not represent regression modelling which best fits the actual
9 historic data.

10 59. This competing goal of stability of trend rate selection between reports, repeated
11 throughout testimony, is significantly different than the goal or purpose specifically
12 identified in the initial paragraphs of the December 31, 2012 Consulting Actuary’s
13 trend rates report of determining trends that **best “... reflect the underlying**
14 ***patterns that occurred during the experience period***”. It was asserted that this
15 “stability” goal was seen by the Consulting Actuary as somehow particularly
16 important for insurers using the benchmark trends (Nov 18, pages 164 and 165).

17 60. In Facility Association’s opinion, the Consulting Actuary’s approach may ultimately
18 produce stable (that is, not changing from one analysis period to another) trend
19 rate estimates, but also poor trend rate estimates (that is, trend rates that do not
20 appear to fit or describe actual results, in contrast with the Consulting Actuary’s
21 **key consideration** recognition). The poor trend rate estimates are a result of the
22 ineffective underlying process used by the Consultant Actuary in assessing and
23 comparing the regressions undertaken. For example, trend rate estimates /
24 models that should be rejected after a robust review and consideration of
25 regression statistics and measures (such as P-values, T-statistics, or other residual
26 analyses such as runs tests), are not rejected, but instead included in the final
27 averaging process used to select the trend rate, without any reasonable
28 explanation to show why averaging poor estimates might somehow result in good
29 estimates. This is also evident in a review of the commentary provided in relation
30 to the regression statistics found in Undertakings U-19 and U-22. In particular for

1 U-19, rather than the Consulting Actuary simply supplying the results of the
2 regression testing for the period 2004-H2 to 2012-H2 as requested by counsel for
3 Facility Association, and whatever the motivation, the Consulting Actuary chose to
4 confuse the request for the specified period by presenting a lengthy commentary
5 on regression analyses for additional arbitrarily selected "alternate" periods. Again,
6 whatever may have been the Consulting Actuary's incentive, the effect of that
7 decision was that two important pieces of information presented in the commentary
8 became less clearly revealed. Firstly, regression analysis for the requested period
9 would have demonstrated a much more superior regression fit for that requested
10 period than the regression fits associated with the Consulting Actuary's December
11 2012 Trend Report. Secondly, had the requested period been used, it would have
12 resulted in a much different and, in fact, a positive Loss Cost trend, as opposed to
13 the negative Loss Cost trend proposed by the Consulting Actuary. Additionally, the
14 selection of these "alternate" periods by the Consulting Actuary triggered the
15 exclusion by the Consulting Actuary of even more data points, as outliers or
16 otherwise, but without any clear admission or acknowledgement by the Consulting
17 Actuary that this had occurred.

18 61. More generally, as noted previously, in her original analysis, the Consulting
19 Actuary has performed regression of selected data for the ten year period ending
20 31 December 2012, an offset ten year period ending June 2012, the five year
21 period ending December 2012 and an offset five year period ending June 2012.
22 However, rather than comparing and assessing these competing regression model
23 results based on objective statistical measures and analyses in order to select the
24 model (or "line") which best fits the actual data, the Consulting Actuary used, via
25 an averaging approach, each of the four regression models regardless of how
26 poorly the regression statistics respond (see Undertaking U-22). As a result of
27 this, the Consulting Actuary has, in the first instance, relied upon regression
28 models even though the T-statistics, P-values and other statistical measures were
29 generally so poor that the resulting trend ought to have been rejected on the basis
30 that the final, ultimately selected, model could not be verified as a good fit.
31 According to Facility Association's actuary, three of the four regression models

1 ought to have been rejected outright and all four regression models ought to have
2 been rejected because of the flawed manner in which outliers were selected, which
3 will be discussed below.

4 62. So even though it is acknowledged by the Consulting Actuary that a key
5 consideration in determining loss cause trend rates include "*how well the*
6 *regression model fits* (in a statistical sense) *the actual historical data*", it has not in
7 fact relied upon the statistical "*fit*" of any model in deciding whether or not to keep
8 any particular regression. Rather, the determination of the data points and time
9 periods to be included in the regression is a mechanical approach that is used by
10 the Consulting Actuary and that adopted process is used regardless of how well
11 the resulting regressions fit in terms of the regression statistics such as P values, T
12 statistics, and residual runs tests.

13 63. Furthermore, the Consulting Actuary then takes the average of these four models
14 and averages that amount with the prior selection. As such, the Consulting
15 Actuary gives 50% weight to the average of the four trends and 50% weight to the
16 prior selection. The rationale of the Consulting Actuary for this peculiar approach
17 is, it claims, to address the volatility and to smooth out the changes in rate trends
18 that occur year over year - again, in adherence to its competing objective of
19 stability, rather than adhering to the originally articulated purpose of determining
20 trends of those that best "*... reflect the underlying patterns that occurred during the*
21 *experience period*".

22 64. Selected loss trend rates can be represented by a fitted line. If any of the
23 Consulting Actuary's final selected loss trend rate "*lines*" were superimposed upon
24 the actual data then none of these lines would represent a "least squares
25 regression" of the data points (ie, the actual data). The Consultant Actuary
26 acknowledges that these loss trend rate "*lines*" do not represent a regression of
27 the actual data points. In fact, the Consulting Actuary, in its 31 December 2012
28 trend rates report acknowledges that its final selections of -1.5 % for bodily injury,
29 0.0% for property damage and +1.0% for accident benefits do not, in fact,
30 represent a regression model of the actual data. Rather the Consulting Actuary

1 clearly acknowledges in its report that its selected trend line is the result of the
2 average of four separate regressions, namely a regression of the data for the ten
3 year period ending December 2012, for the ten year period ending June 2012, for
4 the five year period ending December 2012 and for the five year period ending
5 June 2012, the average of which is then further averaged with the Consulting
6 Actuary's previous period selections.

7 65. In cross-examination during the hearing, the Consulting Actuary's Principal
8 admitted that her approach for her final selection did not constitute regression
9 modeling. On November 18, at page 136, she acknowledged not only that the
10 Consulting Actuary had utilized an averaging approach, she further testified:

11 *"It seems silly to then draw a line for something that's based on an average, **not***
12 ***from a regression model**". [emphasis added]*

13 66. Clearly, if it is viewed as "silly" to actually fit the resulting trend to the actual data,
14 little value is seen by the Consulting Actuary in how **well** the resulting trend "fits"
15 the data.

16 67. In summary, we see the Consulting Actuary completely abandon what is identified
17 in the 16 May 2014 Report as a key consideration, that is, how well the regression
18 model "fits", and instead preferring to focus on "stability" of a selected trend rate
19 from one report to the next. Without reference to the Consulting Actuary's earlier
20 Report for Selected Loss Trend Rates Based on Industry Data through December
21 31, 2012 and cross-examination of her on it, this bewildering departure from its
22 own recognized key consideration would never be revealed. It certainly begs the
23 question how, if the Consulting Actuary does not see any value in determining "fits"
24 of their final selected trends, it can objectively comment on Facility Association's
25 justification which relies heavily on the fit of competing models.

26 68. The third difference in approach is with respect to the identification of data points
27 which might be excluded from the modeling process (i.e. the selection of outliers).
28 On November 5, Mr. Doherty explained the concept of outliers. He described
29 outliers as data points which are significantly different than the fitted line. He also

1 explained how data points could be tested to determine whether or not they are
2 influential, meaning they have a significant impact on the fitted result. He went on
3 to explain that while the removal of any data point would provide a different result,
4 the challenge lay in determining whether, after the removal of the data point as an
5 outlier, the result was representative or was ignoring volatility. When the
6 Consulting Actuary's Principal spoke of outliers on November 17, 2014 at page 26,
7 she described them as statistically extreme points.

8 69. On November 5, 2014 (p.157-158) Mr. Doherty went on to explain that statistical
9 modeling is a residual exercise and that an outlier cannot be determined until the
10 regression line is fitted (otherwise, there is no "residual", or difference between an
11 actual and fitted value, from which to determine whether the "difference" is out-of-
12 the-ordinary). It was his testimony that it would be a challenge to predetermine
13 statistical outliers. He described the process this way:

14 *"I would be challenged in having predetermined statistical outliers if I haven't*
15 *done my analysis. I think that's the cart before the horse, you fit your values and*
16 *then you determine, doing an analysis of the regression itself and the statistics*
17 *that come out and particularly of the residuals and determine whether or not you*
18 *feel there may be an outlier and then you test to see whether or not again that*
19 *outlier is influential to your outcome."*

20 70. In his evidence on November 6, (at page 129-130), Mr. Doherty again spoke to the
21 challenge involved in making a determination that a data point should be excluded
22 because it is a statistical outlier without performing statistical testing. As a result,
23 he disagreed with the "upfront" outlier removal approach taken by the Consulting
24 Actuary.

25 71. In contrast, while the Consulting Actuary refers to her excluded data points as
26 "statistical outliers", the excluded data points do not in reality consist of data points
27 which are necessarily "out of keeping with everything else", or that are "different
28 from the actual experience" (which are phrases used by the Consulting Actuary to
29 describe an outliers). On the contrary, these are data points which are pre-

1 determined by the Consulting Actuary as part of her mechanical approach to
2 selecting loss trend rates. In fact, the data points to be excluded are chosen even
3 before any regression calculation is performed. The standard approach used by
4 the Consulting Actuary is to consistently exclude the two high points and two low
5 points for ten year regressions and to exclude one high point and one low point for
6 five year regressions.

7 72. As Mr. Doherty explained, every data set will have a high and a low value, but it
8 being high or low does not make it an outlier. The Consulting Actuary's Principal
9 seems to have accepted this. On November 17 (page 182), she was asked about
10 this and, again, retreated to a repetition of her mechanical approach to drop (in the
11 case of the ten year periods) the "two high" and the "two low" values.

12 73. As the Consulting Actuary's Principal described it on November 18 (at page 20), in
13 her method she was "...hoping that that (sic) would finesse our model, our
14 approach on a percentage change basis...". When challenged on this (at page 28-
15 29) and asked whether there was any sort of statistical support for these
16 exclusions, she testified "It's the approach that we used". When it was put to her
17 that there was no statistical test that had been used she agreed "no, it's an
18 approach that we've used..." At page 41, this position was put to her:

19 "Yesterday in your evidence you said "I don't think there is a statistical approach
20 that I am going to reference. It's the approach that we've taken to try and smooth
21 out the effect of the highs and the lows.""

22 In response, Ms. Elliott responded that she agreed the statement was correct.

23 74. In addition to this general difference (where Facility Association identifies potential
24 outliers, if any, after having done modeling, then testing whether those potential
25 outliers are influential and therefore considered for exclusion as opposed to the
26 Consulting Actuary's approach to excluding data points as "outliers" prior to
27 performing regression), a further unique difference in the Consulting Actuary's
28 approach arises from the manner in which the excluded data points were pre-
29 determined. Specifically, rather than selecting the data points for exclusion based

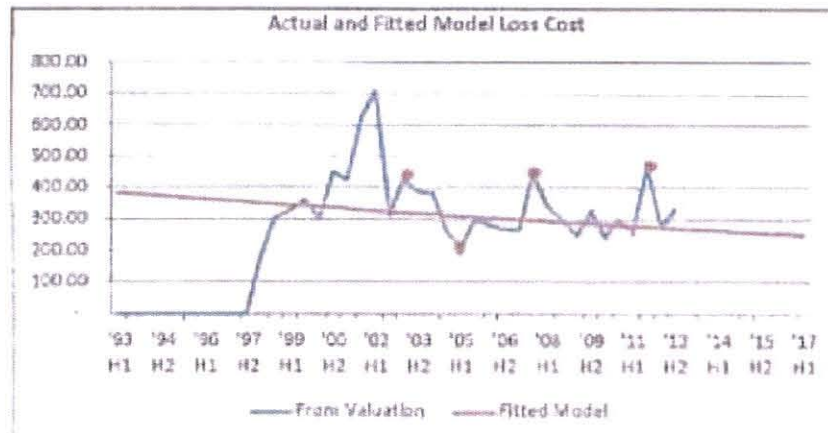
1 on absolute dollar amounts (i.e. the two highest dollar values and two lowest dollar
2 values for ten year regressions and the highest dollar value and lowest dollar value
3 for five year regressions, although, in Facility Association's view, still very much a
4 flawed approach), the Consulting Actuary confirms that:

5 *"for Bodily injury and the other coverages that we review, the excluded points are*
6 *those exhibiting the highest/lowest percentage change from the corresponding*
7 *prior year semester".³*

8 75. This percentage change of value approach taken by the Consulting Actuary has
9 produced peculiar results in the loss trend rates selected. This is best exemplified
10 by Undertaking U-20 in which the Consulting Actuary circled each of the excluded
11 data points on her four preliminary regressions utilized for determining the loss
12 trend rates for commercial vehicles. On page 1 of Undertaking U-20, in the ten
13 year period ending December 2012, the Consulting Actuary has excluded three
14 points that are above her trend line and only one point below the trend line for this
15 model (see graph below labelled "SD1", taken from Undertaking U-20).
16 Interestingly, the first of the excluded data points, 2003-H1 even though it is well
17 above the line, is actually described as a low excluded data point.

³ Footnote #2. Page 6 of report entitled "Newfoundland & Labrador Commercial Vehicles Oliver Wyman Selected Loss Trend Rates based on Industry Data through December 31, 2012"

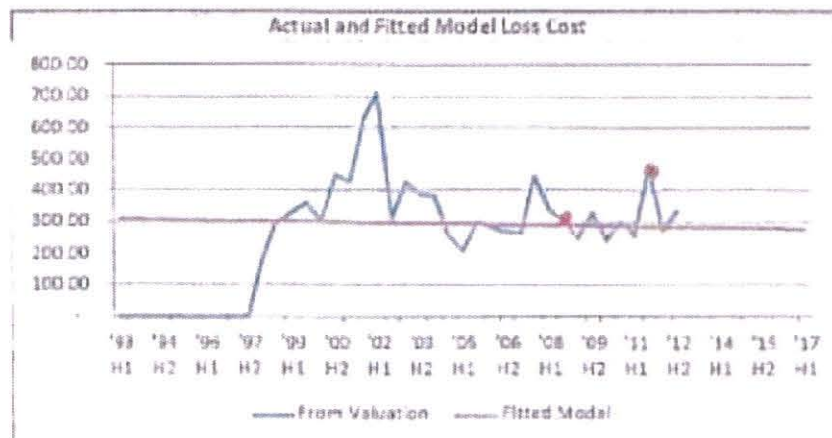
1 Undertaking U-20, page 1, labelled "SD1"



2

3 76. On page two of Undertaking U-20, there are two excluded data points both of
 4 which are above the line (one slightly above the line and one further above the
 5 line). The first excluded data point, 2008-H2 even though it is slightly above the
 6 line it is still described as a low excluded data point (see graph below labelled
 7 "SD2", taken from Undertaking U-20).

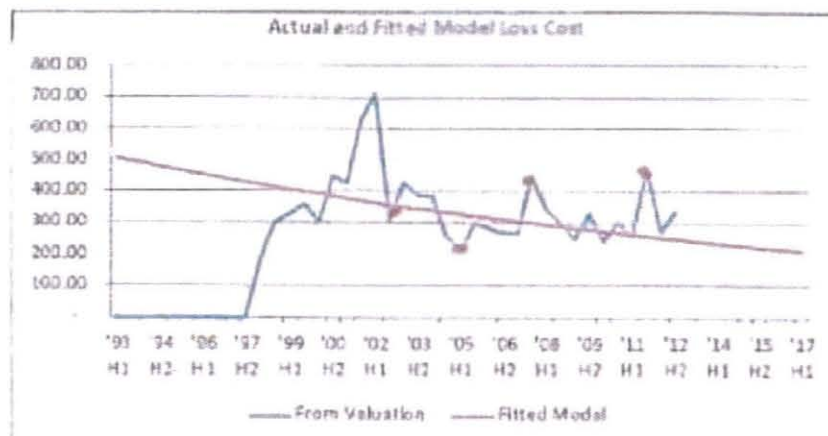
8 Undertaking U-20, page 2, labelled "SD2"



9

10 77. On page three of Undertaking U-20, two of the excluded data points are above the
 11 line, one is slightly below but very near the selected line and one data point is
 12 further below the line (see graph below labelled "SD3", taken from Undertaking U-
 13 20).

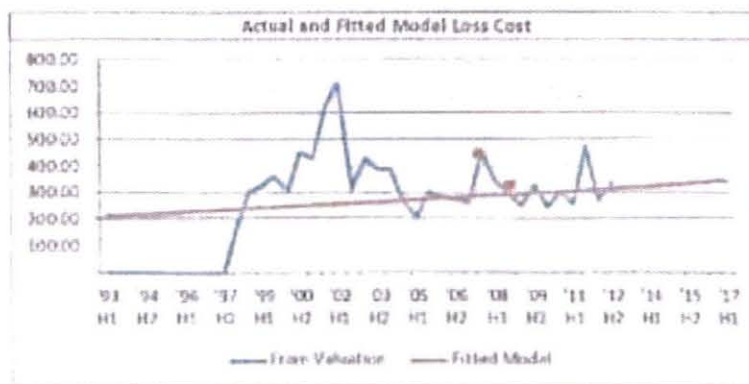
1 Undertaking U-20, page 3, labelled "SD3"



2

3 78. Finally, on the fourth page of Undertaking U-20, there are two excluded data points
 4 both of which are above the line. The second excluded data point, 2008-H2 is
 5 slightly above the line yet it is described as a low data point (see graph below
 6 labelled "SD4", taken from Undertaking U-20).

7 Undertaking U-20, page 4, labelled "SD4"



8

9 79. Examination of some of the actual excluded data point *amounts* in the ten year and
 10 five year averaging process adopted by the Consulting Actuary is also revealing.
 11 The high values, which were excluded in all of the ten year and five year reviews,
 12 were for 2007-2 and 2011-2 being \$449 and \$475 respectively. These two values,
 13 claimed to be statistical outliers, occur only four years apart. The lowest of the two
 14 high statistical outliers was within approximately \$18 of the 2003-H1 value and
 15 within approximately \$20 of the 2001-H1 value, less than the 2000-H2 value and

1 very significantly less than the \$629 and \$713 values for 2001-H2 and 2002-H1.
2 Once again, the mechanical removal of data points not established to be true
3 statistical outliers fails to take into account, the Consulting Actuary's "**key**
4 **consideration of how well the regression model fits**".

5 80. Interestingly, the Consulting Actuary admits that the focus on percentage change
6 between a particular season and the prior season was an approach used by the
7 Consulting Actuary only in June 2012 and December 2012 and was subsequently
8 abandoned. Both before these two dates and afterwards, the Consulting Actuary
9 has selected data points for exclusion based upon the absolute dollar value rather
10 than on percentage change in value. Even though the percentage change
11 approach has been abandoned, because, as the Consulting Actuary's Principal
12 testified, its "...not that great. You know it didn't work", the Consulting Actuary still
13 maintains that its mechanically adopted loss trend rates advocated in the 16 May
14 2014 Report to the Board and based on the abandoned approach, are
15 nevertheless the ones on which it relies and by extension, somehow, better
16 "*reflects the underlying patterns that occurred during the experience period*".

17 81. The decision of the Consulting Actuary to embark upon the percentage change
18 approach in selecting data points for exclusion has been a revealing exercise.
19 More particularly, it reveals the weakness in the mechanical approach taken by the
20 Consulting Actuary year after year. While the Consulting Actuary very clearly
21 accepts how well the regression model "*fits*" as a key consideration, ultimately it
22 simply ignores this **key consideration**. If the Consulting Actuary were alert to the
23 inadequacy of its results in terms of regression statistics and goodness of fit, then
24 surely it would have detected that the exclusion of low data points which look very
25 much like high excluded data points and the mechanical approach to regression
26 models which tended to exclude the high data points versus low data points would
27 lead to an unavoidable bias toward a downward trend in its selected trend rates.

28 82. Although the Consulting Actuary has acknowledged that the percentage change
29 approach has been abandoned, it nevertheless, continues its adherence to a

1 mechanical approach in tossing out data points which, quite obviously, are not true
2 statistical outliers.

3 83. Further, the Consulting Actuary's mechanical exclusion of data points also does
4 not accord with the evidence of its Principal given at a prior rate hearing in 2002, to
5 which she was referred in the present hearing. In particular, the Consulting
6 Actuary's Principal was referred to her own evidence in a 2002 hearing before the
7 Board:

8 *"if you understand why that outlier is what it is, if you go back and as an actuary*
9 *working for a company, certainly you have knowledge of the data and you can*
10 *find out, you know, that--an that's the actuary's job, to find out why this is so*
11 *low, what happened here, and you go back and you investigate and you may*
12 *find out it's just the **randomness in the data**, or you may find out, you know,*
13 *the claims adjusters, they've made this big mistake and it will never happen*
14 *again. So it's the actuary's job to understand the data, and if you can't provide*
15 *a rationale for why the numbers are what they are, to be unbiased you really*
16 *shouldn't exclude too many points."*⁴ [emphasis added]

17 The Consulting Actuary's reference to "randomness in the data" complements Mr.
18 Doherty's own concern, mentioned in paragraph 68 herein, where he, in effect,
19 cautions against "ignoring volatility". On November 5 2014 page 141-142 (lines
20 24-25, 1-5), Mr. Doherty testified:

21 *"... the worry is if you start knocking out a whole bunch of outliers, you end up*
22 *removing a big chunk of data, and when you remove a big chunk of data, then*
23 *our challenge is are you really representing the data or are you ignoring the fact*
24 *that there's a lot of volatility here?"*.

25 84. The 2002 evidence and the approach at that time does not accord with the
26 Consulting Actuary's current approach of automatically excluding highs and lows,
27 whether based on percentages or absolute numbers, without ascertaining

⁴ Transcript, 18 November 2014, pages 147-148.

1 beforehand whether such data might be outliers, nor does the present approach
2 involve a subsequent statistical verification as to whether or not the excluded data
3 points are indeed statistical outliers.

4 85. In sum, taking into account these three major differences in approach (selection of
5 time period, “fit” vs “stability”, and “outliers”), the Consulting Actuary’s failure to
6 engage a robust regression analysis, adopting instead, a mechanical approach
7 with a focus on maintaining stable trend rates from one report to the next, does not
8 generate a best fit for trend analysis. That approach therefore, ignores the
9 Consulting Actuary’s recognized key consideration, that in determining loss cost
10 trend rate, how well the regression model “fits” (in a statistical sense) the actual
11 historical data is essential. This, very likely, is the reason why the Consulting
12 Actuary’s trend models are not an accurate reflection of historical data.

13 86. In addition to the above, and as previously mentioned, the Consulting Actuary’s
14 Principal did focus to a very limited degree on the issue of the adoption by Facility
15 Association of Industry CV Loss Development Factors to be applied to Industry CV
16 experience for development of trend rates. This focus, however, was essentially
17 limited to a single Industry CV coverage, that being Accident Benefits. This issue
18 was raised only as it relates to the Accident Benefits coverage in the Consulting
19 Actuary’s 16 May 2014 Report and in the first bullet at page 14 thereof. In the
20 second and subsequent sentences the Consulting Actuary suggests that Industry
21 CV Loss Development Factors for two particular periods, 18-24 months and 48-54
22 months were higher than suggested by historical data, leading, it was claimed, to a
23 higher estimate of the Accident Benefits loss trend rate. Again, it is extremely
24 important to note that the issue is raised only with respect to Accident Benefits
25 coverage, and not raised in the context of Bodily Injury (BI) or Property Damage
26 (PD) coverages. As noted by the Consulting Actuary at page 8 of its 16 May 2014
27 Report, TPL coverages, comprised of BI and PD, represents approximately 93% of
28 taxi premiums whereas Accident Benefits represents approximately 2%.

29 87. Before more closely examining the Consulting Actuary’s limited commentary on
30 the topic of Loss Development Factors to be applied to Industry CV experience, it

1 should be noted that in the 16 May 2014 Report, the Consulting Actuary confirmed
2 that both Facility Association and the Consulting Actuary independently select
3 claim count and Loss Development Factors that apply to Industry CV experience
4 and, except for Industry CV Loss Development Factors for Accident Benefits
5 coverage, and, about which more will be said, the Consulting Actuary confirmed
6 that Facility Association's selected Industry CV Loss Development Factors and
7 Industry CV Claim Count Development Factors were reasonable.

8 88. It might also be noted that the \$349.99, 2012-H2 value for Facility Association's
9 selected ultimate industry commercial BI loss cost in Facility Association's
10 Appendix B, section 1 Bodily Injury, page 1 of 15 material, being the identical value
11 in the 2012-H2 "GISA" ultimate loss cost column (which includes claims
12 adjustment expenses, whereas Facility Association's does not), is the only data
13 point which matches. For all thirty-nine other selected ultimate loss costs from
14 1993-1 through 2012-H1, the loss costs selected by the Facility Association are
15 lower. The Consulting Actuary's Principal, in her evidence, gave no assurance,
16 nor could she, that this particular GISA selected ultimate (i.e. the 2012-H2 value)
17 could not be understated (as opposed to the implication that Facility Association's
18 selected value is overstated).

19 89. Turning to the specific references to the Industry CV Loss Development Factors
20 selected by Facility Association for Industry CV Accident Benefits indemnity
21 experience, which the Consulting Actuary implied in the 16 May 2014 Report were
22 not reasonable, the Consulting Actuary noted that:

23 *"FA's selection of Loss Development Factors for two development periods, 18-24*
24 *months and 48-54 months, were higher than suggested by the historical data".*

25 The Report went on to note that:

26 *"FA's selected Loss Development Factor for the 18-24 month development*
27 *period is 1.149 whereas the various coverages of historical factors presented by*
28 *FA were all less than 1.00".*

1 Similarly, it was noted that Facility Association's selected Industry CV Loss
2 Development Factor for the 48-54 month development period is 1.035, whereas
3 the various averages of historical factors presented by Facility Association are all
4 less than 1.00. It is peculiar that if the Consulting Actuary was of the opinion that
5 two of those six month age to age Industry CV Loss Development Factors, out of
6 nine such factors (before the factors revert to 1.00), were higher than suggested by
7 historical data, it did not offer its own opinion of what those two Loss Development
8 Factors should be, nor did it request that Facility Association recalculate its
9 indicated rates with those two challenged factors set, for example at 1.00.
10 Additionally, the Consulting Actuary offered no explanation why it took no objection
11 to the selection of Industry CV Loss Development Factors for Accident Benefits for
12 the age to age columns at 30-36, 42-48 or 50-60 months which are higher than the
13 various averages of historical factors for those age to age development periods.
14 All this simply recognizes that actuarially developed Loss Development Factors do
15 not necessarily follow a simple adoption of a final selection loss development factor
16 from the average of historical factors for any particular age to age column analysis.
17 Again, it is important to note that the objection by the Consulting Actuary to the two
18 referenced development periods occur only in Accident Benefits coverage.

19 90. In testimony during the hearing, the Consulting Actuary's Principal then pointed to
20 a single data point (selected ultimate loss cost) in the experience of Bodily Injury
21 Coverage within Industry Commercial Vehicles, and appeared to suggest that the
22 coincidence of the data value at this point, being the same in both the GISA
23 Report, partially produced in PE 6, and the Facility Association materials,
24 somehow suggested that Facility Association's selected loss development factor
25 for industry commercial vehicle Bodily Injury indemnity might be higher than it
26 should be. This commentary is clearly in conflict with the conclusions of
27 reasonableness regarding Industry CV Loss Development Factors in the 16 May
28 2014 Report by the Consulting Actuary (see last bullet on page 10 of the report,
29 which continues into page 11).

1 91. In further evidence during the hearing, the Consulting Actuary may have implied
2 that the use by Facility Association of Industry Commercial Vehicle Bodily Injury
3 loss development factors based on losses only (meaning indemnity only and
4 excluding an expense component) might somehow overstate Facility Association's
5 associated trend rates. Interestingly, no support whatever was provided by the
6 Consulting Actuary for any estimated impact on trend rates associated with this
7 suggestion. More importantly, that evidence, such as it was, is in direct conflict
8 with the written report of the Consulting Actuary, dated 16 May 2014. At page 10,
9 in the first bullet, that report specifically and directly states that "***this difference in***
10 ***the inclusion of claim handling costs (by Oliver Wyman) and their exclusion***
11 ***(by FA) does not appear to have a material impact in the loss trend rates.***"
12 [emphasis added].

13 CREDIBILITY STANDARD FOR THIRD PARTY LIABILITY

14 92. Mr. Doherty outlined, on pages 30-31 of the Actuarial Memorandum and Exhibit E-
15 1, the full credibility standard used for each coverage. Facility Association also
16 provided clarification of its selection of the full credibility standard in responses to
17 questions from the Consulting Actuary (response dated 31 March 2014 to question
18 16 and response dated 16 April 2014 to question 14 from the Consulting Actuary).

19 93. The full credibility standards used in this filing were based on Mr. Doherty's
20 actuarial judgement, as he updated the full credibility standards used by Facility
21 Association to be consistent at the coverage level across all jurisdictions and all
22 rating classes.

23 94. As Mr. Doherty explained in his evidence, as part of this overall update, he has
24 chosen a credibility standard for TPL which differs from that of the previous actuary
25 for Facility.

26 95. Mr. Doherty references as authority for his TPL full credibility standard, the
27 textbook "***Credibility***" written by Howard C. Mahler and Curtis Gary Dean as the
28 underlying basis for his claim count based credibility standards.

1 96. Mr. Doherty further elaborated on this during his evidence on 06 November 2014:

2 *"When I took over the process of the pricing, I made an actual (transcription*
3 *error – should read "actuarial") judgment of application across all jurisdictions for*
4 *setting the full credibility standards that I feel comfortable with for each individual*
5 *coverage, and generally, I've split the coverages into what I call "long tail" and*
6 *"short tail", and the long tail coverages I have at (transcription error – should*
7 *read "at two") times the 10.82 (transcription error – should read "1,082"), and for*
8 *the short tail, I have at 1 times the 10.82 (transcription error – should read*
9 *"1,082"), and it's based on my judgment and my assessment of my comfort level*
10 *with the amount of credibility that we can apply for short tail and long tail."*⁵

11 97. In response to questions from Board counsel, Mr. Doherty advised that the change
12 in the full credibility standard for TPL indivisible resulted in an increase of about
13 seven percent in the rate indication but that he was not aware that this amount of
14 increase would be the result of the change in the credibility standard. However, he
15 did state:

16 *"We knew that the change overall would tend to give more weight to experience,*
17 *the actual experience underlying it. In some classes of business that means that*
18 *because the experience is better than the underlying it would improve the*
19 *results, i.e. rate indications would drop. In some classes, some jurisdictions, it*
20 *would go the other way. It really is giving more weight to the experience than*
21 *what it was under the other methodology and really depends on how the*
22 *experience looks relative to the rates."*⁶

23 As an example of this unbiased approach, as per Undertaking U-14, changes to
24 the full credibility standard used for comprehensive and specified perils reduced
25 the former while increasing the latter. Finally, the Consulting Actuary also updates
26 their processes and approaches on occasion, as stated Nov 17, page 166: "We

⁵ Transcript, 06 November 2014, page 92, lines 5-18.

⁶ Transcript, 07 November 2014, page 124, lines 8-19.

1 *don't do everything the same all the time. We try to look at what we're going*
2 *[translation error – should be “doing”]; how to do it better.”*

3 98. The Consulting Actuary confirmed that its only issue with Facility Association's
4 choice of credibility standard is that *“there's a change in the filing without any*
5 *support for the change in that standard, so that was raised as an issue in our*
6 *report.”* As noted by the Consulting Actuary in its report, while there is science
7 underlying the selection of the full credibility standard, considerable judgment is
8 exercised by actuaries in selecting the full credibility standard for each coverage.

9 99. As outlined above, a full explanation for the choice of full credibility standard has
10 been explained and analyzed by Mr. Doherty in his report, in responses to
11 questions and in direct evidence during the hearing which ought to satisfy the
12 Board that there are valid reasons for this change over the previous year's filing.

13 100. The Consulting Actuary has failed to point to any particular criticism in Mr.
14 Doherty's actuarial judgment in selection of the full credibility standard. Its sole
15 criticism is that the selection represents a change from the previous year's filing
16 but offers no support for a view that it is an inappropriate selection. It is Facility
17 Association's submission that there is nothing inherently wrong in adopting a
18 change in actuarial approach where the change is properly explained and
19 supported. The alternative to this is the treatment of all prior actuarial approaches
20 and methodologies as binding precedent. The latter view simply embraces a rigid
21 and mechanical approach about which much has already been said.

22 **COMPLEMENT OF CREDIBILITY**

23 101. Mr. Doherty provides an overview of the complement of credibility on page 31 of
24 the Actuarial Memorandum, Exhibit C-2, and in responses to questions of the
25 Consulting Actuary (31 March 2014 responses to questions 18 and 19) and in the
26 response to questions CA FA 9 and CA FA 10.

27 102. Mr. Doherty elaborated upon the choice of complement of credibility in his direct
28 evidence on 6 November 2014. He explained that in 2012, upon assuming the

1 pricing responsibilities from the previous actuary, Facility started to re-evaluate its
2 pricing methodology. With respect to the complement of credibility, Facility
3 Association's re-evaluation noted a difference in approach applied to three rating
4 classes (Private Passenger, Commercial, and Interurban) and all other rating
5 classes (including taxis). Facility Association adopted the approach used for
6 Private Passenger, Commercial and Interurban to apply to all classes. This
7 approach, now applied to the taxi class is not new, rather it has been used for
8 many years in all jurisdictions, including Newfoundland and Labrador for Private
9 Passenger, Commercial and Interurban classes.

10 103. Under this approach, if Facility Association had not done a rate filing for a
11 particular class in the last two or three years, then it would start with the
12 assumption that the expiring rates are adequate. However, if Facility Association
13 did have a rate filing within the last two to three years for that particular class, then
14 it would start with the assumption that its best estimate of the projected loss ratio
15 can be pulled from that previous filing. Facility Association then takes this initial
16 estimate and projects it forward based on claims trends and premium trends,
17 which is done in Exhibit C-2.

18 104. In giving his evidence, Mr. Doherty explained why it would not be appropriate in
19 the present rate application to start with an assumption that its rates are currently
20 adequate.⁷ It is important that the complement of credibility be both unbiased and
21 accurate. With regard to being unbiased, this means that when reviewing the
22 performance of your complement of credibility, half the time it's better and half the
23 time it's worse than your prediction. A more accurate prediction would be one with
24 a narrow difference between the prediction and the actual results.

25 105. Facility Association's view is that a rate deficiency remained of approximately 13%
26 based on the difference between the need and the approved 2013 change. The

⁷ Transcript, 06 November 2014, page 88.

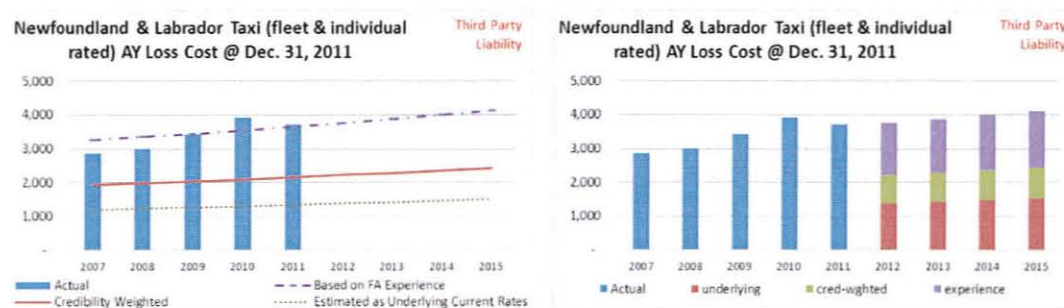
1 Consulting Actuary, however, does not "... find it appropriate to make an
2 adjustment for rate inadequacy carried forward from its prior application".⁸

3 106. The support provided by the Consulting Actuary in relation to its view of using
4 benchmark trends and a 4% ROI was for a +51.7% increase (mandatory
5 coverages only), indicating that they too show a rate deficiency (albeit much
6 smaller than Facility Association's).

7 107. The Consulting Actuary's assumed ROI of +4%, in Facility Association's view, was
8 not an appropriate return assumption. The 2% assumption used by Facility
9 Association was based on new money rates then assumed to be available on risk-
10 free returns, whereas the Consulting Actuary's subsequent estimate was that the
11 industry ROI for 2013 was +2.8%⁹. That +2.8% is much closer to Facility
12 Association's assumption than the Consulting Actuary's assumption, while still
13 reflecting returns that may not be risk free, nor solely based on risk-free securities,
14 nor reflective of the timing of the rate program effective dates (Aug 1, 2013).

15 108. Furthermore, the Facility Association NL Taxi experience for accident year 2012
16 can be projected from the 2013 Facility Association NL filing information. This was
17 done with respect to TPL and provided in response CA FA 5. The associated
18 charts are provided below.

TPL Loss Cost by Accident Year Consistent with 2013 Filing



19
20 109. Rather than accident year 2012 Facility Association NL Taxi loss costs coming in
21 at \$2,219 as projected under the assumptions used in support of Facility

⁸ 16 May 2014 report of Consulting Actuary, page 17.

⁹ 16 May 2014 report of Consulting Actuary, page 18.

1 Association's rate indication (for TPL, it was +66.2%, although Facility
 2 Association's proposed rate increase was only +50.1%), the Facility Association
 3 NL Taxi loss costs came in at \$3,475, a level only 7.5% lower than that projected
 4 from the 2013 filing assumptions based on the Facility Association NL Taxi
 5 experience. This supports not only that Facility Association's view that a rate
 6 deficiency remained from the prior year, but that the rate deficiency was even
 7 higher than previously thought, hence Facility Association's current rate indication.
 8 Clearly, if the +50.1% rate increase asked for and approved in 2013 was a "true
 9 best estimate", it stands to reason that the accident year 2012 loss costs would
 10 have been at a level no higher than \$2,219.

| Accident Year 2012 Loss Cost Comparisons | 2013 filing projected AY 2012 loss costs | | | 2012 AY as at 31-Dec-12 |
|---|--|------------|-----------|----------------------------|
| | underlying | experience | cred wght | |
| loss cost: | 1,383.28 | 3,754.74 | 2,218.72 | 3,474.97 |
| var from dec 2012 LC: | 2,091.69 | (279.77) | 1,256.25 | |
| % variance: | 151.2% | (7.5%) | 56.6% | |

11
 12 110. Additionally, the Consulting Actuary was of the view for the 2013 Facility
 13 Association NL Taxi filing that the benchmark trend rates were more appropriate.
 14 The table below compares the 2013 Facility Association NL Taxi filing trend rates
 15 with the associated benchmark rates for accident years (AY):

| Bodily Injury | applies to AYs 2009 and prior | applies to AYs 2010 and later |
|----------------------|----------------------------------|----------------------------------|
| FA Selected | +2.4% | +4.0% |
| NL Benchmark | 0.0% | 0.0% |

| Property Damage | applies to AYs 2009 and prior | applies to AYs 2010 and later |
|------------------------|----------------------------------|----------------------------------|
| FA Selected | +3.8% | +1.9% |
| NL Benchmark | +0.5% | +0.5% |

17

| Accident Benefits | applies to AYs 2009 and prior | applies to AYs 2010 and later |
|--------------------------|----------------------------------|----------------------------------|
| FA Selected | +1.6% | +4.2% |
| NL Benchmark | +5.0% | +5.0% |

1

2 111. Based on the above, trend rates applicable to Facility Association NL Taxi TPL
3 (combining BI and PD) were between +1.9% and +4.0% for Facility Association,
4 but 0.0% to +0.5% for the Benchmark.

5 112. However, the Facility Association NL Taxi TPL experience itself on an accident
6 year basis was analyzed at the accident year and loss cost level in response to
7 CA FA 6 and the results show that Facility Association NL Taxi TPL loss cost trend
8 rate at a much higher level than either of the trend rates applied by either the
9 Facility Association or the Newfoundland Benchmark shown above.

10 113. Mr. Doherty stated that it was his belief that neither of the complements of
11 credibility that are proposed (by Facility Association and the Consulting Actuary)
12 are unbiased, nor have they been accurate in relation to the experience for taxis
13 over the last ten years. However, it was his opinion that Facility Association's
14 complement of credibility was the better of the two:

15 *"Both of them suggest the loss cost should be much lower than they have*
16 *been. That is, either we've had 10 or 12 years of bad luck, or the current rates*
17 *really aren't adequate, and that's not a good assumption to have. Both of them*
18 *are showing levels that are significantly below. It's just that this one, in*
19 *particular, for loss ratios in Row 14 for third party liability, we start off at 93.8,*
20 *and we would be in the 68 or 70, or something like that if the rates were*
21 *adequate. So, obviously, if the higher one is biased - or not accurate because*
22 *it's always below, and biased because it's always below, a lower one is even*
23 *going to be worse. So that's our position on the two complements of credibility*

1 that are being proposed. We believe both are not great, but ours, we think, is
2 more supported if you look for the goal of being accurate and unbiased.”¹⁰

3 114. The Consumer Advocate questions whether the assumption that current rates are
4 inadequate, in effect, ignored the order of the board from the 2013 rate filing. In
5 response, Mr. Doherty explained:

6 *“I determine the rate level based on my assessment of the process that we*
7 *have, including what I believe is rate deficiency coming forward. If the Board*
8 *chooses a set of assumptions that they think is applicable, I will certainly tell*
9 *them what the indication based on that is, and they can make themselves*
10 *consistent with their view of whether or not the rate level change that we got*
11 *last time brought our rates to adequacy. The indication that we have is my work*
12 *product based on my assumptions. You know, if I’m ordered to show an*
13 *indication based on alternate set of assumptions, I do that, just as if you asked*
14 *for different sets, I’ll show you what those results are, but my own personal*
15 *view is supported by the indication bringing forward a rate inadequacy into our*
16 *current review.”*¹¹

17 115. Mr. Doherty also noted that if Facility Association had not filed for a rate change
18 within the past two or three years, they would have started from the position that
19 the current rates were “adequate” (i.e. they would not have alerted the Board to the
20 apparent deficiency in the rates). Mr. Doherty believes that it would not be fair in
21 those circumstances to start with the assumption that rates are inadequate, even if
22 the experience suggests that such rates are indeed inadequate.¹² However, in this
23 particular case, Facility Association did file for a rate change in the immediately
24 prior period, and that rate application clearly alerted the Board to existing rate
25 inadequacy.

¹⁰ Transcript, 06 November 2014, pages 89-90.

¹¹ Transcript, 06 November 2014, pages 148-149.

¹² Transcript, 06 November 2014, pages 150-151.

1 **FACILITY ASSOCIATION NON-INDEMNITY EXPENSES**

2 116. Although not constituting actuarial evidence, the Consulting Actuary in the 16 May
3 2014 Report, also briefly addressed the matter of Facility Association's expense
4 provisions.

5 117. The Consulting Actuary made no actual findings other than agree that Facility
6 Association's expense provisions are accurately included in the calculations of rate
7 level change need presented by Facility Association.

8 118. As noted by Mr. Doherty in his evidence, Facility Association conducts its
9 business, in part, pursuant to a Plan of Operation (the "Plan"). This Plan of
10 Operation is, pursuant to the *Insurance Companies Act*, a statutorily recognized
11 and authorized operational guide and specifically prescribes the terms by which
12 insurance brokers and servicing carriers are compensated. Facility Association is
13 therefore legally obligated, and either has or will make payments to brokers and
14 servicing carriers in the manner and at the rates and times prescribed by the Plan.
15 The Plan is subject to the approval of the Superintendent of Insurance and as
16 noted by Mr. Doherty, and as evident in page 15 of the Plan, amendments to
17 certain provisions for compensation of service carriers are still pending approval by
18 the Superintendent of Insurance for the Province of Newfoundland and Labrador.

19 119. Although no more expert with respect to Facility Association's expense obligations
20 than the Consulting Actuary, Mr. Doherty did provide some explanation and insight
21 into the types of obligations and responsibilities imposed particularly upon service
22 carriers by the Plan. It would be presumed that adopting, in part, a percentage
23 format for payment of commission and serving carrier expenses would greatly
24 reduce the costs associated with maintaining specific and individual records for
25 those activities. While the taxi rate grouping is a relatively small one, the Plan
26 applies to all industry commercial, non-private passenger and private passenger
27 business conducted in Newfoundland and Labrador through Facility Association.

28 120. As approval for the terms of the Plan falls within the jurisdiction of the
29 Superintendent of Insurance, it is submitted that any attempt to suggest that the

1 Board of Commissioners of Public Utilities should approve revised rates to be
2 charged for Public Vehicles – Taxis and Limousines with expense provisions
3 somehow recognized as being other than those prescribed by the Plan would be
4 inappropriate and would encroach upon the jurisdiction of the Superintendent of
5 Insurance.

6 **TERRITORIAL IMPLICATIONS**

7 121. During the course of the hearing the Consumer Advocate focused on the issue of
8 territorial distinction among the four territorial areas. The four areas are, territory
9 four, the Avalon Peninsula, territory five, Burin and Bonavista Peninsulas, territory
10 six, Labrador and territory seven, the balance of the island.

11 122. It appeared that the Consumer Advocate was primarily interested in whether there
12 was sufficient data to permit distinctions to be drawn for separate rating within the
13 four territories.

14 123. As Mr. Doherty explained, by reason of the extremely small taxi population, as a
15 whole, and the even smaller taxi group in the territories outside the Avalon area,
16 with for example, approximately thirty written exposures in Labrador, it would be a
17 real challenge to attempt to separate those territories and move away from a single
18 base rate applicable to all of them.

19 124. If there was a single aspect or component of the Consulting Actuary's position
20 which was stressed during the course of the hearing, it was the extremely small
21 and therefore extremely volatile nature of experience for the taxi group, and even
22 for that matter, the Industry Commercial Vehicle group. The Consulting Actuary
23 focused continually on the difficulty with attempting to fix rates given the
24 considerable volatility of experience within those groups. Separating out, for
25 example Labrador as a separate segment, would create a pool of approximately
26 3% of the overall written exposures for taxi for all jurisdictions. As acknowledged
27 by the Consulting Actuary, the implication of different rates for each of the four
28 territories does not impact Facility Association's overall rate requirements. As both
29 Mr. Doherty and the Consulting Actuary recognized, Facility Association needs a

1 certain amount of money to pay expenses and to satisfy the indemnity
2 requirements. How that amount is divided up as between driving record, type of
3 vehicle or the territory in which a policyholder resides, only establishes what one
4 policyholder pays in comparison to another policyholder.

5 125. The Consumer Advocates himself summed up the issue accurately when he
6 observed that it is not the size of the pie that is an issue, it is how the pie is to be
7 sliced up.

8 126. As might be expected, breaking down the taxi group by territory would likely also
9 have the effect of imposing greater expenses upon Facility Association and
10 presumably its servicing carriers for the maintenance records and statistics for
11 even smaller components of the general rating group.

12 **OWNER/OPERATOR DISCOUNT**

13 127. The present Facility Association Rate Application proposes the discontinuance of
14 the discount previously permitted for vehicles where the policyholder (and, where
15 applicable, the policyholder's spouse) is/are the only operator(s). The owner
16 driven discount is seen as incongruous with Facility Association being a market of
17 last resort.

18 128. Like the provision for rating for more than one use, the owner driven taxi discount
19 is open to mischief.

20 129. The owner driven taxi discount allows for a reduction in premium that would
21 otherwise be collected by Facility Association, based largely on the honor system.
22 However, based on the insurance system in Newfoundland and Labrador, an
23 owner driven vehicle being operated with the permission of the owner by another
24 operator does not relieve Facility Association of its obligations under the policy to
25 pay third party claims up to the statutory minimum, notwithstanding that the
26 insured vehicle is being operated by other than its owner. Accordingly, a breach
27 by the owner/operator of the assurance in the application for insurance that the
28 vehicle is driven only by the owner, does not relieve Facility Association of liability

1 under the policy, at least to the extent of the statutory minimum for third party
2 liability coverage amounts.

3 **RATING FOR MORE THAN ONE USE**

4 130. Under the proposed wording, if a vehicle is used for more than one purpose, the
5 highest rated class (based on premium) must be used, regardless of the
6 percentage of exposure.

7 131. This is a situation where premium is in effect determined on an honor system. If
8 an applicant asserts that the vehicle is used 50% for personal use and 50% for taxi
9 use, the vehicle is rated for premium as if it's only use is as a taxi.

10 132. Again, rating on the basis of the information contained in the insurance application
11 leaves the rating open to mischief. In the event that a vehicle which is said to be
12 used 50% for personal use and 50% for taxi use is used 100% for taxi purposes,
13 Facility Association would nevertheless be liable under its policy up to the statutory
14 minimum limits for third party claims notwithstanding that the statement with
15 respect to percentage of use is inaccurate. Not only is there a risk that any
16 servicing carrier investigation following an at-fault claim event may not reveal the
17 true percentage of taxi use and personal use, the expense incurred by the
18 servicing carrier associated with the investigation of the claim would also be
19 expected to increase.

20 **RETURN ON INVESTMENT (AND THE NOVA SCOTIA COMPARISON)**

21 133. The Facility Association Rate Application is presented, as disclosed in the
22 Application and as explained by Mr. Doherty in his evidence, as including a cost of
23 capital provision, consistent the actuarially supported target after - tax return on
24 equity of 12%, capital required based on a ratio of premium- to- surplus ratio of
25 2:1, along with an income tax rate assumption of 29.0% and the before tax return
26 on investment (net of expenses) assumption of 1.14% as estimated based on
27 estimated future cash flows and investment returns.

- 1 134. Ignoring what it has determined are actuarially supported rate indications, the
2 Facility Association proposed rate changes by coverage are based upon a 0.0%
3 cost of capital assumption and a 2.8% net investment return, as directed by the
4 Public Utilities Board filing requirements.
- 5 135. Although the proposed rates are presented with a 0.0% cost of capital assumption
6 and a 2.8% net investment return, as prescribed by the Board's filing requirements,
7 Mr. Doherty's evidence is that only a 1.4% ROI is available, unless the investments
8 move off a risk free asset portfolio, in which event, insurers must put up additional
9 capital to support the added risk associated with those investment choices. As Mr.
10 Doherty testified, there have been dramatic changes to investment yields available
11 following the financial crisis in 2007 and 2008. It was Mr. Doherty's opinion that in
12 the current investment market, it is not possible to assemble a risk free investment
13 portfolio that would generate 2.8% yield.
- 14 136. Considerable attention and weight was focused, particularly by the Consumer
15 Advocate, on certain Nova Scotia experience. The Nova Scotia experience
16 appeared to be advanced to support the view that in Nova Scotia, the rate
17 regulator had accepted the Consulting Actuary's selection of Loss Trend Rates
18 and therefore, the same selection ought to be adopted in Newfoundland and
19 Labrador.
- 20 137. There are at least three important distinctions which arise between the present
21 Rate Application in this jurisdiction and the Rate Application decisions referenced
22 in Nova Scotia. One critical distinction is that the Nova Scotia Rate Applications
23 were for Private Passenger and for miscellaneous vehicles. Neither decision
24 appears to have any bearing on taxi fleet arrangements and for which, in
25 Newfoundland and Labrador, at least, the experience has been much worse than
26 for Private Passenger. Mr. Doherty spoke of the significantly greater frequency
27 that taxi operators are involved in at-fault claims compared to other drivers.
- 28 138. Another distinction arises in the significantly different ROE guidelines in place in
29 the two jurisdictions. Here, as noted, Facility Association, in accordance with the

1 Board's filing guidelines, has presented its proposed rate increases with a 0.0%
2 cost of capital assumption. In Nova Scotia, the Board has approved an 11% ROE
3 for Facility Association. The Board in Nova Scotia recognized that Facility
4 Association represents higher risks than those insured in the standard market and
5 faces greater uncertainty than applies in the standard market. The 11% ROE
6 approved for Facility Association by the Nova Scotia Board is said, by that Board,
7 to be a higher ROE than ordered by the Board for other companies.

8 139. Having an 11% ROE cushion, in and of itself, presents the Nova Scotia Facility
9 Association member companies with a very significant protection that uncertainty
10 in Facility Association's operations will not result in losses for the Facility
11 Association members in that jurisdiction.

12 140. In addition to this, the Board in Nova Scotia in its two recent decisions, has
13 accepted the evidence of Facility Association that an ROI of 1.39% should be
14 allowed for setting rates. Facility Association's evidence of a 1.39% ROI was
15 based upon government of Canada risk free returns available as at 30 September
16 2013 and the projected cash flows associated with the Nova Scotia experience.
17 As such, the accepted Nova Scotia return is equivalent to the 1.14% return Mr.
18 Doherty testified was appropriate, in his opinion, in respect to Newfoundland taxis.

19 **CONCLUSIONS**


20 141. As evident in Exhibit D1, Facility Association member companies in Newfoundland
21 and Labrador have been suffering losses for a number of years. Insisting on the
22 adoption of optimistic trend rates, as proposed by the Consulting Actuary, only
23 increases the risk that Newfoundland and Labrador member companies will be
24 exposed to further losses in the future.

25 142. It is the position of Facility Association that the NL taxi experience has continued to
26 be poor and the trend of increasing claims costs is expected to continue. Even
27 with the 2013 rate increase in premiums, based upon experience over the last 10
28 years and current trends, the premiums received will be insufficient to cover the
29 ultimate indemnity costs, and again, those costs do not take into account the

1 expenses that will also be incurred by Facility Association and its membership.
2 Notwithstanding this reality, Facility Association recognized the potential
3 challenges the taxi industry may face in adjusting its revenues to reflect increases
4 in insurance costs. In light of this, Facility Association in both the prior rate filing
5 and in this rate filing opted to propose rate changes that were lower than the
6 indicated rate changes.

7 143. Facility Association has presented a well-founded, statistically and actuarially
8 sound basis to substantiate the requested rate increase, one which is actually
9 lower than the Facility Association's indicated rate increase.

10 All of which is respectfully submitted this 9th day of January, 2015.

11 
12 _____
13 Kevin F. Stamp, Q.C.

Counsel for Facility Association