DECISION

2017 NSUARB 134
M08015, M08028 & M08029

NOVA SCOTIA UTILITY AND REVIEW BOARD

IN THE MATTER OF THE INSURANCE ACT

- and -

IN THE MATTER OF APPLICATIONS by **INTACT INSURANCE COMPANY, TRAFALGAR INSURANCE COMPANY** and **NOVEX INSURANCE COMPANY** for approval to modify their rates and risk-classification systems for private passenger vehicles

BEFORE: Murray E. Doehler, CPA, CA, P.Eng., Member

APPLICANT: **INTACT INSURANCE COMPANY**
TRAFALGAR INSURANCE COMPANY
NOVEX INSURANCE COMPANY

FINAL SUBMISSIONS: June 27, 2017

DECISION DATE: **August 4, 2017**

DECISION: **Applications are approved.**

Document: 257546

I INTRODUCTION

[1] Intact Insurance Company, Novex Insurance Company and Trafalgar Insurance Company ("Intact", "Novex", "Trafalgar" or "Companies") each filed supporting documents and materials "Applications" with the Nova Scotia Utility and Review Board "Board" for approval to modify their rates and risk-classification systems for private passenger vehicles. The Applications, dated April 13, 2017, were filed electronically on April 18, 2017, and the original documents were received on the same date.

[2] Information Requests were sent to Intact on May 8, June 7 and June 14, 2017, and responses were received on May 15, June 13 and June 21, 2017, respectively.

[3] As a result of a review by Board staff, a staff report dated June 22, 2017 "Staff Report", was prepared and sent to Intact for review on the same date. Intact responded on June 27, 2017, indicating that it had reviewed the Staff Report and had no comments.

[4] The Board did not deem it necessary to hold an oral hearing on the Applications.

II ISSUE

[5] The issue in these Applications is whether the proposed rates and changes to the risk-classification systems are just and reasonable and in compliance with the *Insurance Act* "*Act*" and its *Regulations*.

III ANALYSIS

[6] The Companies sought approval to change rates and risk-classification systems for private passenger vehicles. The Applications were made in accordance with the Board's *Rate Filing Requirements for Automobile Insurance – Section 155G Prior Approval* "*Rate Filing Requirements*". The Companies' mandatory filing dates are May 1, 2018.

[7] The proposed effective dates, subsequently revised for the Applications, are September 27, 2017, for new business and October 27, 2017, for renewal business.

Rate Level Changes

[8] Intact proposed changes to its base rates that vary by coverage but not by territory. Intact also proposed to make changes to its discount offerings, to some of its underwriting rules and to adopt the 2017 Canadian Loss Experience Automobile Rating "CLEAR" table. Intact also proposed to maintain its current premium dislocation cap.

[9] The proposed change represents an overall rate level increase of 7.6%. To support these changes, Intact provided actuarial indications that suggest Intact should increase its rates overall by 13.8% with the differences varying by coverage

[10] The total number of private passenger vehicle insurance contracts for Novex and Trafalgar are too small to warrant separate analyses. Both companies rely, therefore, on the Intact analysis as support for the proposed rates. Novex current rates match the Intact rates and Novex proposed the same changes as Intact with the overall impact on the Novex contracts being an increase of 8.0%.

[11] Trafalgar rates, while not matching, are based upon the Intact rates. Except for the change to the myDriving® Discount that it does not offer and the introduction of the One-Pay Discount that it will not offer, Trafalgar also proposed the same changes as Intact with the overall impact being a 7.8% increase in rates.

[12] Most of this Decision deals with Impact's Application but should be viewed as applying equally to Novex and to Trafalgar, where appropriate.

[13] In considering the Applications, Board staff reviewed all aspects of the ratemaking procedure, including the following:

- Loss trends and the effects of reform;
- Loss development;
- Credibility standards, procedure and complement of credibility;
- Premium (rate group drift) trends;
- Expense provisions, including Unallocated Loss Adjustment Expenses;
- Experience period and weights;
- Premium to surplus leverage ratio; and
- Target and proposed Return on Equity

[14] Based on the staff's review of the filing, there are two issues surrounding the Intact analysis of its rate level needs that arose where additional discussion is required. These issues are loss trends selections and profit provision. All other issues raised in the information request process, including concerns about expenses of the usage based insurance program, were successfully resolved.

Loss Trends

[15] The Company based its selected loss trend rates primarily on a review of internal Intact experience in Nova Scotia through to December 31, 2016. Arguing that it represents a sizeable portion of the market and that most of its coverages are fully credible, Intact believes its experience is sufficiently large enough to warrant the use of

its own data to determine loss trends. However, for Bodily Injury and Direct Compensation for Property Damage "DCPD", Intact used industry data through to June 2016. The Company could only get seven years of reliable internal data split between the two because the kind of loss codes required to do so were missing in the earlier years. Ideally Intact prefers to have more than seven data years when making its trends selections.

[16] Intact reviewed its experience from 2004-2016. The Company assigned more weight to the years 2012-2016 when selecting trends for the indication calculations.

[17] With the release of the industry claims experience data through to June 2016, Board staff requested Oliver Wyman "OW", the Board's consulting actuaries, to develop their selections for loss trends for private passenger vehicles. OW selected trends after examining both 5 and 10 years of data. OW examines trends for frequency, severity and loss costs, relying more heavily on the latter, when developing its trend selections. OW determined separate trends for the Third Party Liability components (i.e., for Bodily Injury, and for Property Damage-Tort and DCPD combined).

[18] For Collision and DCPD, OW selected two past trends. The first applies before April 1, 2013, and the second for April 1, 2013, and after. DCPD was introduced on this date and that introduction may have changed the nature of the trends.

[19] For future trends, OW used the past trend, assuming it would carry forward into the future. For Collision and DCPD, the trend after April 1, 2013, was used.

[20] A comparison of the two sets of trends by coverage shows that some of the differences are greater than 1.25%.

[21] Intact provided indications using the OW selected loss trends which shows, overall, a smaller indicated increase. Overall the difference is not that large, despite larger

variances for some coverages. The Board has tended not to allow the use of Company data solely to develop trends. However, Intact represents about one-sixth of the NS market and Board staff are inclined to view the Intact experience as appropriate for that use. Intact uses industry data for Bodily Injury, Property Damage-Tort and DCPD, while OW makes different selections using the same data. Board staff do not believe the differences are significant enough to require the use of the OW selections for these coverages.

[22] Board staff recommends, therefore, in the circumstances of these applications only and without prejudicing any future applications, acceptance of the Intact loss trends as appropriate. These trends are then to be used in calculating the indications which are used as the target against which to assess the appropriateness of the Intact proposal.

Profit Provision

[23] In its methodology, the underwriting profit margin, permissible loss ratio and premium-to-surplus ratios are not input variables, but rather are outputs of the pricing model.

[24] Intact used a model that projects cash flows for a policy using assumptions about expenses, losses, investment income, etc. It also has, as model inputs, a target return on equity "ROE", which Intact has chosen to be 12%, and the percentage of the Office of the Superintendent of Financial Institutions "OSFI" minimum capital test that the Company desires to hold. While that test is a minimum capital test, OSFI requires

companies to hold a higher percentage. For its model, Intact used 230% for a minimum capital test, which is higher than that used by the Board in past applications.

[25] In the last two filings, Intact also sought to use a similar percentage of minimum capital test in its model. The Board, however, in its decisions, required the Company to use 185% in the model along with a 10% ROE. The change in this percentage results in a higher premium to surplus ratio that approaches the more common 2:1.

[26] In recent decisions, the Board has required companies, including Intact, to lower the target ROE to 10%. This action was taken as a result of Board concerns that, as evidenced in part by the release of the 2012 and 2013 General Insurance Statistical Agency Financial Information report, the industry appeared to be earning ROEs well in excess of the 12% the Board believed it was approving.

[27] The 2014 and 2015 version of these reports show negative ROEs for the industry for private passenger vehicles. This result is likely more a result of many companies not taking full indicated rates coupled with some deteriorating experience that is possibly related to inclement weather at the start of 2015, as opposed to the result of the Board forcing companies to the lower end of its profit range. As such, the Board has continued to require the 10% ROE for most companies.

[28] While not asked directly why the Board should treat Intact differently, the Company offered some observations in response to a request to provide indications using 10%:

> First of all, we believe that the use of these parameters aren't suitable for the current market conditions. In the last 5 years, Intact ROE has surpassed the 12% mark only once while for all other years the ROE was under 10%. Furthermore, we know that for the last 3 years the NS PPV loss ratio was higher than the national average so we could expect that a ROE based only on NS PPV business would be even lower. With this filing, the ROE being

produced by our proposed rate change is 7.64%. This shows that Intact hasn't experienced extreme profitability in the past couple of years and should not be required to use a 10% ROE.

		Loss Ratio PPV	
	ROE	*Nova Scotia*	*Canada*
2012	*7.4%*	*54.7%*	*69.9%*
2013	*5.3%*	*54.6%*	*69.7%*
2014	*12.7%*	*76.2%*	*69.7%*
2015	*9.6%*	*77.9%*	*72.9%*
2016	*7.1%*	*78.3%*	*73.9%*

[Partial Response to question 6 of IR-1]

[29] Reflecting on the concerns Intact raised about its experience in Nova Scotia, relative to the rest of Canada, Board staff note that, in each of the past three filings (one a year since 2014), Intact has proposed changes to rates that have been below both its indications and the Board approved indications. That is, like the industry, the lower ROEs are more likely caused by the taking of smaller than indicated increases than the result of the Board forcing the Company to use a lower ROE. Board staff have concluded that the 10% ROE the Board is applying to the industry remains appropriate for Intact.

[30] Intact produced the indications labelled "Alternate", using the 10% ROE and the 185% minimum capital test assumptions. The result was an overall indicated increase of 9.9%.

[31] The Board will use these indications to assess the reasonableness of the Intact proposal.

Comparison of Proposed Rates to Indicated Rates

[32] The comparison of the proposed rates to the "Alternate" indications show they are all in the same direction although the magnitude is different. Smaller than indicated increases for Property Damage-Tort, DCPD, Comprehensive & Specified Perils,

and All Perils, were partially offset by rate changes that resulted in slightly higher than indicated rates for the remaining coverages.

[33] For SEF#44, despite an indication for a large reduction, Intact proposed no change. Intact, like most in the industry, do not have many claims under this coverage, and a harsh reduction as indicated may not be prudent.

[34] As a result, the overall proposed increase is smaller than the “Alternate” Indicated increase. Because the proposed change is lower overall than that indicated, the calculated ROE using the proposed rates is 8.1%, which falls below the 10% lower end of the Board range for ROE.

[35] Board staff believe that Intact has provided sufficient support for its proposed rates. The Board approves the proposed rates, as filed.

Other Proposed Changes

Territorial Differentials

[36] Intact conducted a territorial analysis to determine the indicated rate changes by territory and coverage. After reviewing these indications, Intact chose to leave these differentials unchanged.

[37] Board staff support Intact’s proposal to make no changes to the territorial relativities. The Board approves the proposal, as filed.

Adoption of 2017 CLEAR Table

[38] Intact proposed to change from its current use of the 2016 CLEAR (Canada) (AB Alberta & Atlantic) table with Collision and DCPD combined, to the 2017 version of the same table.

[39] Intact off-balanced the impact of the table change for all coverages to make the adoption revenue neutral.

[40] Board staff support, and the Board approves, the adoption of the 2017 CLEAR table and the associated off-balancing of the impact, as filed.

myDriving® Discount (i.e. Usage Based Insurance Program)

[41] Intact and Novex have a usage based insurance program, the myDriving® Discount, approved by the Board. Trafalgar does not offer this program and therefore this section does not apply to that company.

[42] Intact proposed some changes to the program. The first change deals with the available discount levels and the assignment of the levels. The second involves a change to allow the use of a mobile phone application, or App, instead of the dongle (the telematics device installed in the vehicle) to track the usage statistics.

[43] Intact also explained that as a result of the systems limitations with its usage based insurance provider, all of the proposed changes for the program will be effective on the date of enrolment into the program provided it is on or after the effective date for new business (i.e. September 27, 2017).

Discount Levels

[44] Intact proposed two changes surrounding the discount level. The current discount is based solely upon the usage based insurance score that results from the driving behaviour. Under the proposed changes, in addition to the usage based insurance score, the driver's number of years licensed as well as the rating territory will be used to develop the discount level.

[45] Intact observed that there are differences between the average usage based insurance scores and the resultant merit discounts in different territories as well as for drivers with a different number of years licensed. The Company offered several examples of how these differences may arise:

- urban drivers find themselves more frequently in stop and go traffic than rural drivers;
- commuters from rural areas are more likely to drive on highways for their commute than urban commuters; and
- mature drivers (i.e. more years licensed) may have different driving schedules (e.g. more commuting for work, more errand running, less nighttime driving).

[46] Given the differences in driving patterns, using a common usage based insurance program with its standard set of adverse event criteria to assign a score, may be capturing some signals from the data that should be captured by some other non-usage based insurance rating variables.

[47] To account for this, Intact proposed to vary the discount provided by creating numbers of years licensed and rating territory segments. The manner in which the usage based insurance score is calculated, based on the adverse events information provided by the dongle, will not change. However, how that score maps to the merit discount will vary by these two additional variables. The discounts have been mapped

within the segments so that each segment will have an expected average discount equal to the average discount originally targeted for the initial program. To do this, the usage based scores that give rise to each merit discount level will differ within each segment.

[48] The new approach will see six usage based insurance segments. Intact provided current experience information showing that the present average discount does indeed vary among these segments. This provided support for the proposal.

[49] In addition to the introduction of usage based insurance segments, Intact proposed the addition of a 0% level to the available discounts. Presently, drivers with the worst usage based insurance scores are awarded a 5% discount. While this is a step down from the 10% enrollment discount, it still sees every enrollee achieve at least some discount going forward. The proposed change will see the worst drivers receive no future benefit.

[50] Intact explained that in Ontario, the cohort that are proposed to receive no discount had exhibited such bad driving behaviour that they really should be surcharged. Given the inability to use usage based data to apply a surcharge, and that providing such risks with a discount seems inappropriate, the next best alternative is to assign no discount at renewal.

[51] While the New Brunswick and Nova Scotia data remains too small to be credible, Intact explained that the data from its usage based insurance program in Ontario is large enough to be credible. The Company used this data in a Generalized Linear Model to conduct an analysis. While the analysis developed indicated differentials, these values were used only to determine if the Intact selections for discounts was directionally consistent with those indicated differentials.

[52] Using the same data, Intact also conducted a one-way analysis to develop indicated differentials as another source to determine further the suitability and consistency of the selected differentials.

[53] When the actual differentials proposed, including the no discount level, are compared to these indicated differentials, they are consistent directionally and, therefore, seem reasonable to Board staff.

[54] Intact further explained that the no discount category was approved for use in its programs in both Ontario and New Brunswick.

[55] Board staff support Intact's proposal to segment the usage based insurance discount and the proposed introduction of the no discount category.

[56] The Board approves the proposed changes to the usage based insurance program discount levels, as filed.

Mobile Phone App

[57] The current version of the usage based insurance program at Intact requires the installation and maintenance of a dongle in the vehicle for at least 180 days to collect the required driving behavior data. In this Application, Intact proposed to allow the use of a mobile phone App to collect the driving behaviour statistics instead of requiring the use of a dongle. Intact is creating a mobile phone App usage based insurance program.

[58] Intact explains that the costs associated with the dongle, including the loss of devices that are not returned, can be significant. With the use of the App, there is no device cost. As well, the concern about the loss of the measuring device is eliminated.

[59] While the App is different from the dongle, the adverse driving events it is trying to capture are the same. Because the way in which the App collects or measures adverse driving events is different, Intact must change the details associated with how to recognize that such events occurred using the App.

[60] The usage based insurance program seeks to record the number of harsh braking events, rapid acceleration events, and night time driving events. For the first two, the dongle uses information directly from the vehicle speed sensor to measure wheel rotation. The App, however, will use the Global Positioning System ("GPS") speed to determine whether an event has occurred. Even though both attempt to measure the same events, the difference in how this is accomplished can lead to a different number of events being recognized and collected and hence, the usage based insurance score may be different.

[61] In addition to the event determination concern, the dongle measures the behaviour of all drivers of the vehicle while the App will measure only the behaviour as recorded by the principal operator's phone.

[62] Based upon these two differences, it is conceivable that the principal operator could receive different scores depending upon which device is actually used to track the driving behavior. Ideally, adjustments would be made so that the scores, and the associated discounts, would be the same regardless of the device used. Intact proposed to make such adjustments.

[63] To determine the adjustments, the Company conducted an App versus Dongle pilot study using a group of 59 employees across Ontario and Quebec. Data was recorded using both devices for each participant from June 1, 2016 to August 22, 2016.

The study measured the differences in how each device registered a harsh driving event, what the severity of those events were, and eventually what the impact was on the usage based insurance score.

[64] After analyzing the data from the pilot study, Intact developed new event definitions for the App as well as an adjustment factor. Intact established thresholds for low, medium, and high harsh braking and rapid acceleration events. This was done separately for different phone operating systems (i.e. Android and Apple) to reflect nuances in the way the data is recorded for each system.

[65] Intact also developed an adjustment factor that is applied to the usage based insurance score for mobile users to convert it to a comparable dongle-based result. This approach attempts to ensure the discount received is consistent whether an App or a dongle was used to gather the information. The factor was developed using the aggregate scores from the pilot study.

[66] Intact indicated it will monitor comparisons between the App and dongle programs to make sure the comparability holds. If Intact notices unwarranted differences in how the discounts provided are distributed for the same mix of business, the Company will consider a review of the thresholds and/or the adjustment factor. Any changes would be submitted to the Board for approval.

[67] Board staff support Intact's proposed introduction of the App to measure the driving behaviour as well as for the proposed event thresholds and adjustment factors.

[68] The Board approves the mobile phone App usage based insurance program, as filed.

One Pay Discount

[69] Intact proposed to apply a 5% discount in those situations where the principal operator pays his full annual premium in a single payment. This discount is offered in Ontario and the change harmonizes the two provinces.

[70] Intact's analysis suggested the discount could be twice the proposed level. The Company explained that the mix of business could change with the incentive provided by the proposed discount and such a change could impact the indicated level. The proposed 5% level was viewed as a prudent one for introducing the discount in Nova Scotia.

[71] The discount will only be used by Intact and Novex. Trafalgar has system limitations that do not allow it at this time.

[72] The Board approves the proposed One Pay Discount for Intact and Novex, as filed.

Rate Manual Changes

[73] Intact proposed a few changes to the Rate Manual and rating rules. One change removed the Renewal Review Risks section. This section outlined the criteria that would require the policy to be reviewed at renewal. A second change introduced a maximum vehicle value ($500,000) that the Company would allow the broker to bind.

[74] As a result of the information request process, a potential violation of the *Regulations* was removed from the proposed criteria for the New Business/Loyalty Discount.

[75] The Board approves the proposed changes to the Rate Manual, as revised.

Premium Dislocation Capping Change

[76] To manage the dislocation experienced by its clients, Intact, Trafalgar, and Novex each apply a 15% premium dislocation cap at renewal. If there is no material change in the risk that a vehicle poses to the Company at renewal, the premium will not increase by more than 15%.

[77] Where there has been a minor conviction during the policy period before the renewal, the cap is increased to 25% to allow the impacts of any minor conviction (i.e. loss of conviction free discount or conviction surcharge) to pass through. The cap returns to 15% if, in the next policy period, there is no new minor convictions.

[78] Based on data as of February 2017, the average time until the removal of the cap is just over one year for all three companies.

[79] There are a number of risks that could remain subject to the cap for a longer time (i.e. five to seven years). Intact explained that these are outliers from prior acquisitions/portfolio transfers. The Company suggested that the typical risk in an acquisition situation is capped for two to three years but for these cases, the difference between Intact and the prior carrier rates was so large that a longer period is required to bring them to Intact rates.

[80] Board staff continue to believe that it is in the best interests of all involved to remove the cap in a more efficient or quicker manner, so as to avoid large rate shocks in the event the risk materially changes during a policy year, forcing removal of the cap at renewal. This is supported by discussions on the issue that have occurred at various meetings of rate regulators. In some cases, regulators have required companies to

remove the cap after two years. When asked what effect such a requirement would have Intact responded:

> …eliminating capping only for these policies for which it has been in place for more than 2 years is not something we would be able to program. And if we were to remove capping for all policies at once, then the segment of our insureds which is impacted the most by this year's rate change would suffer from not having a capping in place to smooth their premium increase.
>
> [Response to question 5 of IR-2]

[81] While this is an area that may require future Board focus, Board staff do not believe it warrants an immediate reaction at this time and, therefore, supports the continuation of the premium dislocation cap.

[82] The Board approves the continuation of the premium dislocation cap, as filed.

Rate Manual Review

[83] Board staff have reviewed the Rate Manuals on file and found no instances where the Companies are in violation of the *Regulations*. The Companies proposed no changes to the Rate Manuals other than those necessary to effect the changes noted in this Decision.

IV FINDINGS

[84] The Board finds that the Applications comply with the *Act* and *Regulations*, as well as the *Rate Filing Requirements*.

[85] The financial information submitted by the Companies satisfies the Board, pursuant to Section 155I(1)(c) of the *Act,* that the proposed changes are unlikely to impair the solvency of the Companies.

[86] The Board finds the proposed rates are just and reasonable.

[87] The Applications included full actuarial indications and the required territorial analysis; therefore, they qualify to set the new mandatory filing date for private passenger vehicles for each Company to April 1, 2019.

[88] The Board approves the effective dates of September 27, 2017, for new business and October 27, 2017, for renewal business.

[89] The Companies are required to file an electronic version of their updated Rate Manual within 30 days of the issuance of the Order in this matter.

[90] An Order will issue accordingly.

DATED at Halifax, Nova Scotia, this 4th day of August, 2017.

Murray E. Doehler