New Brunswick **INSURANCE** Board — Commission des **ASSURANCES** du Nouveau-Brunswick

Filing Guidelines
Rate Filings RFG – 1 MAJOR

RFG-1, RFG-2, RFG-7 and RFG-8 are considered Rate Filings.

FAILURE TO COMPLY WITH THESE GUIDELINES WILL RESULT IN RETURN OF FILING WITH REQUEST TO AMEND AND RE-SUBMIT.

OMISSION OF ANY OF THE FILING OR DISCLOSURE GUIDELINES WILL RESULT IN A DELAY OF THE REVIEW PROCESS.

When referring to the New Brunswick Insurance Board, NBIB and the Board are interchangeable.

Filing Guidelines

The purpose of these Guidelines is to communicate to insurers the requirements for Major (RFG-1) insurance rate filings that do not qualify for a Simplified or Minor filing and to provide a systematic approach through which insurers may provide that information and thus facilitate the process of preparing as well as reviewing these filings.

Major filings entail an actuarial analysis that is required in the following circumstances:

- annual private passenger rate filings except for those adopting approved reference rates (RFG-2); and
- annual commercial and miscellaneous vehicles rate filings unless they fall below the threshold as outlined in Information Bulletin 2009-003.

The Board may waive the obligation for an actuarial analysis of premium requirements in circumstances that the Board deems appropriate. The most common circumstance would be where there is no credible experience.

The following tables summarize the type and purpose of filings.

The following changes may also be included within an RFG-1 Filing:

- Discounts/Surcharges, Underwriting Rule, Rating Rule – Introduction, Amending, Removing (refer to Section 4.m & 4.n)
- Endorsements - Introduction, Amending, Removing
  - Proposed Endorsement – Include a copy of the proposed wording in both official languages.
  - Copy to Superintendent of Insurance – A copy of the proposed wording must also be sent to the Superintendent of Insurance at: info@fcnb.ca (Companies must have approval from both the Board and the Superintendent of Insurance prior to implementing.)
- Rate Group Table Update
  - Companies do not need to submit the tables. Provide rate group table identification (i.e., year and type) and complete Section 2: NBIB Summary Sheets – Step 2 NBIB Confidential row 82-87.

Filing Format – RFG-1

Subject to the guidelines set forth in Section C, the filing should contain the informational sections, as outlined below, and in the order outlined below:

Section	Contents/Document	Format	Document Name
	Cover Letter	Word, PDF	Cover Letter
1	Table of Contents	Word, PDF	
2	NBIB Summary Sheets	Excel	Filing Summary RFG-X vX.XX*
3	Appendix A	Word, PDF	Appendix
4	Actuarial Justification	PDF	Actuarial Justification
5	Final Rates/Rate Level Change	Excel	Algorithm BR Current BR Proposed Discounts/Surcharges
6	Proposed Manual Pages Containing Revised Rates and Rating Program	Word, PDF	Pr Manual
7	Final Filing (only required *after filing has been approved* and only for filings that were amended through the review/approval process)	PDF, Excel	FINAL
8	Endorsement Wording (as applicable)	Word, PDF	Endorsement

*insure to include the RFG number and version number that was supplied in file name at time of download from NBIB site

Submitting a filing to the Board

Original Filing

Filings must be submitted electronically by email to filings@nbib-canb.org .

- Separate filings must be submitted for each vehicle class i.e., PPV, Commercial (acceptable to combine Interurban with Commercial Vehicles), Motorcycles (including mopeds), ATV, SV, etc.
- If an insurer is submitting filings for more than one company, separate emails must be sent for each company and each filing.
- **Actuarial Justification Pages Must Be Numbered**. Each section and subsection should be labeled according to the section and subsection numbering outlined in the Actuarial Justification Outline section below.
- Footnotes must be included where applicable (e.g., explanation as to how exhibits interconnect with each other.)

Amendments:

- Submit amendments via email only, unless otherwise directed by the Board.

- **Subject line format is** *"(Date Amended) YYYY_MM_DD" "Company Short Name" "Type of Vehicle Short Name" "RFG-#" "Amendment"*. Example: ***2015_09_30 Company PPV RFG-1 AMENDMENT***

For Effective Dates Amendments

- Submit via email and include all corresponding filing documents with the new effective dates.

For Summary Sheet Amendments

- Provide details of the amendment(s) and if applicable the cell(s) in the spreadsheet that are affected.

For Actuarial Justification Amendments

- **Actuarial pages must be sequentially numbered to match original filing numbering.** If an amendment is an additional page to be inserted between page 98 and 99, label it 98a. Companies must indicate if the page is an additional or replacement page. **Indicate on the top right corner the date of amendment. The entire actuarial justification document must be resubmitted.**

Naming Convention

See NBIB Summary Sheet "Start Here Cover Sheet" Row 2 for Naming Convention of Company Short Name and Type of Vehicle Short Name

Email Subject Line:
Date Submitted "YYYY_MM_DD" "Company Short Name" "Type of Vehicle Short Name" "RFG-#" "Original/Amendment/Response"

Documents:
"Company Short Name "_"Type of Vehicle Short Name"_"RFG-#"_"Document Name"

Approval Process

The NBIB will send an email to the insurer within two (2) business days to acknowledge receipt of a filing. The filing will then be reviewed for completeness based on these filing guidelines and the Insurer will be informed of any information required to complete this filing.

Once a filing is deemed complete, the NBIB and/or its consulting actuaries will proceed to review the technical components of the filing. The NBIB may request further information from the insurer.

Queries from the Board or its consulting actuaries must be responded to **within four business days**.

A. FILING DOCUMENTS REQUIRED FOR RATE FILING – RFG-1

COVER LETTER

Provide details on the filing being submitted and outline the changes being proposed and the rationale. The filing cover letter must set out the name, title, insurer name, business address, telephone number and email address of the individual authorized to act as contact on behalf of the Insurer. The named contact person must be prepared to respond to questions posed by the NBIB or its consulting actuary and accept correspondence from either on behalf of the insurer relating to this filing.

SECTION 1: TABLE OF CONTENTS

This section contains a listing of the contents of Section 2 through 8 of the filing and should be in sufficient detail to serve as a reference, by page number, for the location of specific elements of the filing.

SECTION 2: NBIB SUMMARY SHEETS

NBIB Summary Sheet Template (Excel Format ONLY) – Available on the NBIB website for download.[1]

The NBIB Summary Sheet is one Excel document with multiple worksheet tabs. It must be completed and submitted as part of the filing package with the correct naming convention: *"Company Short Name" "Type of Vehicle Short Name" "RFG-#" Original Filing Summary*. Example: ***Company PPV RFG-1 Original Filing Summary.***

If necessary, the amendments should be submitted with the naming convention: *"Company Short Name" "Type of Vehicle Short Name" "RFG-#" Amended Filing Summary*. Example: ***Company PPV RFG-1 Amendment Filing Summary.***

The worksheet tabs are as follows:

Technical Notes - Technical notes to aid the insurer in the filing

Stat Territory Map - Mapping of the 11 statistical territories in New Brunswick

Start Here NBIB Cover Sheet – Considered Non-Confidential.

Dislocation and Rate Capping - Capping of rates is a tool that insurers employ to limit dislocation of premium and, thereby, improve retention where revisions to rating programs create substantial changes in the distribution of premium among risk profiles. The principal causes of such dislocation are revision of relativities for existing rating variables or introduction of a new algorithm with new rating variables, though it could relate to acquisition of a portfolio.

Insurers have the option to apply capping to premium and can use capping so as to preserve overall premium level provided.

Step 2 NBIB Confidential - The information on this sheet is considered confidential and NOT available to be viewed by the public.

Map of Rating Territories – The map is considered confidential. If varying from the 11 statistical territories, insurers MUST include a copy of the proposed or existing rating territories

Wording Change Doc – Complete ONLY when there is a proposed change to underwriting rules, rating rules, and/or discounts and surcharges.

FA Comparison – Complete ONLY by Non-Standard market writers. Compares the most recent approved Facility Association rates to the company's proposed rates.

[1] http://www.nbib-canb.org/en/filingPackage.php

SECTION 3: Appendix A

LOA / STATEMENT REGARDING FA DATA/CERTIFICATE OF ACTUARY

- **Signed Letter of Authorization** - A letter signed by an officer of the company on whose behalf the filing is being made, granting the individual identified the authority to submit the filing. Authorized officers are the President, CEO, CFO, CCO, any vice-president, the treasurer, or the corporate secretary or Chief Agent for Canada for the company.
- **Signed Facility Association Statement** - A signed statement from the CEO of the company.

  Note: Direct losses should be the basis for ratemaking and should **not** be reduced by the insurer's cession to the Risk Sharing Pool. Direct losses should **not** include losses incurred on the Facility Association Residual Market risk business. Similarly, **where industry-wide statistics are used, Facility Association Residual Market Risks results should be excluded.** The Facility Association will be the exception to this rule.
- **Signed Certificate of Actuary**

SECTION 4: ACTUARIAL SUPPORT

Rate Indications

Provide detailed actuarial justification for rate level indications for all applicable coverage types. Actuarial support should contain the data and narrative description of all ratemaking steps for each coverage type. In general, documentation should be in sufficient detail to enable the Board to trace the resulting rates from the raw data experience and other supporting data.

The NBIB does not require insurers to adopt a specific ratemaking methodology. However, rate indications should be developed in accordance with generally accepted actuarial principles including the appropriate utilization of professional judgment in the ratemaking process.

Rate Selections

Insurers wishing to deviate from the justified rate level indications developed will need to furnish the Board with a descriptive narrative explaining the rationale behind the proposed deviations (Section 2: NBIB Summary Sheets – Step 2 NBIB Confidential row 97). The Board will only consider such factors, apart from actuarial methodology, as are presented to them by the insurer. These factors might include, but are not limited to, competition, market share, business plans, etc. The rationale provided should be as detailed as possible in order to illustrate for the Board that the rate selections are reasonable deviations from rate indications.

The Actuarial Justification should be comprised of the subsections listed below, **in the order set out below**. Each section or subsection must be labeled according to the numbering scheme provided and contain all data, data definitions and sources, and any narrative necessary to explain or clarify the various ratemaking steps.

4.a. Overall Description of the Ratemaking Methodology and Summary

4.b. Losses

1. Projection of Ultimate Losses
2. Loss Trend
3. Treatment of Large Losses
4. Catastrophe (or Excess Claim) Procedure
5. Other Adjustments

4.c. Allocated Loss Adjustment Expenses (ALAE)

1. ALAE Development
2. ALAE Trend
3. Catastrophe Procedure
4. Other Adjustments

4.d. Unallocated Loss Adjustment Expenses (ULAE)

4.e. Premium

1. On-level Adjustments
2. Premium Trend
3. Other Adjustments

4.f. Other Expenses

1. Exposure Variable Expenses
2. Premium Variable Expenses

4.g. Profit Provisions

1. Underwritintg Profit Rates
2. Discounting
3. Target and Implied Proposed Underwriting Profit Rate

4.h. Credibility

4.i. Other Adjustments

4.j. Summary Rate Level Indications

<u>Rate Differential Indications:</u>

4.k. Territorial Indications

1. Indicated Differentials
2. Off-balance
3. Territorial Definition Changes

4.l. Classification/Limit of Liability/Deductible or Other Rate Differential Indications

    1. Indicated Differentials
    2. Off-balance

4.m. Discounts/Surcharges

1. Indicated Discounts or Surcharges
2. Off-balance

4.n. Rating Based on Group Membership

1. Indicated Discounts or Rates for Groups
2. Off-balance

Exhibits/Appendices - source data should be clearly identified on all Exhibits and Appendices.

Sections (4.a) – (4.k) must be completed in all cases. In addition, sections (4.l) – (4.n), as applicable, must be completed if the filing proposes to change classification, limit of liability, deductible, or other rate differentials, whether with or without any overall rate level change.

4.a. Overall Description of the Ratemaking Methodology and Summary

In this section, indicate the type of approach used (pure premium or loss ratio) and outline the process in a summary narrative. Insurers implementing any changes to the ratemaking methodology used in the previous filing must provide justification and rationale.

Include a general description of the data that was used. Specific and detailed information on the data should be included in the appropriate subsections using that data. For example, liability loss data should state whether it is for all limits combined or if it is for a specific (basic) limit.

The filing must include the most recent complete year of data that is available. Should the filing rely on industry experience, we would expect any filing received after industry data is released to include the most recent industry data.

Indicate the weights used in the filing. Insurers are requested to use weights consistent with the last filing presented to the Board. If the weights used in the filing have changed, justification and rational will be required.

4.b. Losses

State if losses are considered together with ALAE. If this is the case, all references to "loss" in this section will be considered to be referring to "losses and allocated loss adjustment expenses." *In this event, section **4.c.** can be omitted.*

Describe the type of loss data (i.e., accident year or policy year). If another basis is used, justification must be provided.

Note the experience period, respective valuation dates and the source of the data (e.g., company internal data, company data as reported by IBC). The insurer's own data must be used to the extent that is credible.

New Brunswick specific loss data for the filed category of insurance at the coverage level must be used.

State whether the loss data are gross or net of salvage and subrogation.

Direct losses should be the basis for ratemaking and should **not** be reduced by the insurer's cession to the Risk Sharing Pool. Direct losses should **not** include losses incurred on the Facility Association Residual Market risk business. Similarly, **where industry-wide statistics are used, Facility Association Residual Market Risks results should be excluded.** The Facility Association will be the exception to this rule.

4.b.1. Projection of Ultimate Losses

Losses must be developed to an ultimate level using an appropriate method.

Outline the specific approach used to project loss to ultimate in the filing and the details of the calculations. All judgments associated with the process of projecting loss to ultimate should be disclosed in detail and supported (e.g., the selection of loss development factors, selection of expected loss ratios, weight assigned to each loss projection method).

Loss development should be based on the insurer's own data to the extent possible. At a minimum, the history of unadjusted company loss development data valued at 12-month intervals should be provided (so-called "triangles" of loss valuations at various stages of development). If loss development for a partial accident year is used, then comparable experience at the same level of maturity must be provided to support the selected factors.

Should the insurer find it necessary to rely on outside data or a different source of internal data (such as affiliated company data), identify the source of the data and provide an explanation of its applicability. All data used in the process of loss development must be exhibited and labeled (e.g., are the losses paid or case incurred, what are the dates of valuation).

State if credibility procedures are used in loss projection methods. If it is used, disclose and support the selection of the credibility criterion, the application of the credibility standard, and the complement of credibility.

The general approach to project loss to ultimate can be expected to remain reasonably constant over the years for an insurer. Disclose and support any change in either the approach or the underlying data from the prior rate filing.

4.b.2. Loss Trend

Outline the specific loss trend approach used in the filing and the details of the calculations. All judgments associated with the process of loss trends should be disclosed in detail and supported.

Loss trends are should be based on a review of the most recent available New Brunswick industry–wide experience for each class of insurance and coverage to the extent possible. To the extent credible, loss trends based on the insurer's own experience may also be useful to reflect the dynamics of the insurer's business. Should the insurer find it necessary to rely on outside data or a different source of internal data, the filing must identify the source of the data and provide an explanation of its applicability. All data used in the process of estimating annual loss trend must be exhibited, at least in summary form, and labeled (e.g., are losses paid or incurred, developed or undeveloped).

Historical information should be adjusted to be on a comparable basis by considering changes in benefit levels or in legislation that has occurred.

Selected trends must be supported with an analysis of the indicated loss cost changes using an appropriate loss trend methodology. Although loss cost trends are generally considered sufficient, frequency and severity trends are often reviewed and analyzed separately in the selection of trend factors. Loss trend selections that do not follow the indicated loss trends must be rationalized and explained.

State if credibility procedures are used in estimating loss trends. If it is used, disclose and support the selection of the credibility criterion, the application of the credibility standard, and the complement of credibility.

The length of the trend period will depend on the term of coverage offered by the insurer, the proposed effective date, and the valuation date of the loss data. Each of these items must be disclosed. If trend is divided into past trend and future trend components, each component must be fully disclosed and supported in the detail described above, and the date to which future trend is applied must be disclosed and supported.

The general approach to estimating loss trend can be expected to remain reasonably constant over the years for an insurer. Disclose and support any changes in either the approach or the underlying data from the prior rate filing.

4.b.3. Treatment of Large Losses

Clearly indicate how large losses in the experience period have been handled. If losses have been capped, the number of such losses and the effects of the caps must be demonstrated. The insurer should ensure that large losses do not cause significant instability in the rates from one period to the next.

If a large loss loading is used, justification must be provided for the derivation of the loading and the method in which the loading is applied.

4.b.4. Catastrophe (or Excess Claim) Procedure

Note: The province of New Brunswick is rarely impacted by catastrophes affecting automobile insurance claims. The NBIB does not expect that there should be a loading for this.

Comprehensive, specified perils, and all perils coverages may be subject to losses arising from natural catastrophes. If a procedure is used to estimate the impact of such losses, outline the specific catastrophe procedure used. Disclose and support the details of the calculations and all judgments associated with the process of calculating the catastrophe provision.

The catastrophe procedure should make use of the insurer's own data to the extent possible, augmented where necessary by other relevant data. All data used in calculating a provision for catastrophe losses must be exhibited and labeled.

Disclose and support any changes in either the approach or the underlying data from the prior rate filing.

4.b.5. Other Adjustments

Any other adjustments to the loss data should be disclosed, documented, and supported in this subsection.

For example, the filing must include commentary as to the approach taken to account for the impact of product changes such as the July 2013 changes to the MIR.

Data must be exhibited and labeled, procedures must be outlined, and changes from the prior rate filing must be noted.

4.c. Allocated Loss Adjustment Expenses (ALAE)

If ALAE are considered separately from losses, provide the same detailed information as for the losses in section **4.b**.

4.d. Unallocated Loss Adjustment Expenses (ULAE)

Outline the specific ULAE approach used in the filing and the details of the calculations. All judgments associated with the process of loss trends should be disclosed in detail and supported.

The estimate of ULAE should make use of the insurer's own data for each class of insurance and coverage to the extent possible. Should the insurer find it necessary to rely on outside data or a different source of internal data, the filing must identify the source of the data and provide an explanation of its applicability. All data used in the process of estimating ULAE must be exhibited and labeled (e.g., are the ULAE paid or incurred, calendar year or accident year, expressed as a "%" of losses or premiums).

Disclose and support any changes in either the approach or the underlying data from the prior rate filing.

4.e. Premium

Disclose the premium data, the experience period and the source of the premium data. Direct premiums (i.e., prior to any reinsurance transactions) should be the basis for ratemaking and must not be reduced by the insurer's cessions to the Risk Sharing Pool. Direct premiums must not include premiums for the Facility Association Residual Market risk business.

4.e.1. On-level Adjustments

All premiums used in the filing must be adjusted for all rate changes previously approved by the NBIB.

If using a loss ratio approach, earned premiums must be adjusted to the level of the present rates by using an appropriate on-level procedure. Display both the unadjusted and the adjusted premiums.

If using a factor approach (e.g. parallelogram) for on-level adjustments, disclose the calculations. If on-level adjustments are made by means of calculating premiums at present rates through computer re-rating of policies (i.e. extension of exposures), a description of the process should be provided with a comparison of the results to the results obtained using the parallelogram method. Any significant difference should be explained.

The insurer's history of rate changes for each coverage for the prior five years should be included in this section.

4.e.2. Premium Trend

Premium trend should be considered for coverages with inflation-sensitive exposure bases or for coverages where a changing mix of exposures may result in a corresponding change in premium income to the insurer. The changing mix of exposures with respect to the makes and models of cars for physical damage coverages is an example of a change in mix of exposures that could produce premium trend. (Under CLEAR [Canadian Loss Experience Automobile Rating], premium trend is already accounted for in the development of the rate groups.)

The specific premium trend approach used in the filing should be outlined and details of the calculations should be disclosed and supported. All judgments associated with the process of premium trend should be disclosed in detail and supported.

Premium trend should make use of the insurer's own data to the extent possible. To the extent that the premium trend measures changes in the mix of business over time for the insurer's own portfolio, a commensurate adjustment to the loss experience for the changing mix of business must also be included in the analysis.

Should the insurer find it necessary to rely on outside data or a different source of internal data, the filing must identify the source of the data and provide an explanation of its applicability in the instant circumstance. All data used in the process of estimating premium trend must be exhibited and labeled.

The general approach to estimating premium trend can be expected to remain reasonably constant over the years for the insurer. Any change in either the approach or the underlying data from the prior rate filing should be disclosed, explained, and supported.

4.e.3. Other Adjustments

Any other adjustments to the premium data should be disclosed, documented, and supported in this subsection.

Data must be exhibited and labeled, procedures must be outlined, and changes from the prior rate filing must be noted.

4.f. Other Expenses

Other expenses (i.e., non-claims related expenses) should be divided between exposure variable (fixed) and premium variable (variable) expenses in a manner that is consistent with the way the insurer conducts its business, the manner in which expenses are incurred, and the type of unit insured. The details of this segregation of expenses should be disclosed and documented.

Where an insurer is proposing to vary rates based on the type of distribution system, separate expense statistics must be maintained and filed in support of the rates.

For the latest year, the allocation of expenses to the class of insurance filed should also be reported.

There should be no expense provision established in respect of the Facility Association Residual Market, unless there is a known subsidy in its operation. The Risk Sharing Pool should be treated as direct business and therefore should be reflected in the direct loss and premium data.

No additional expense should be provided for by servicing carriers in respect of servicing Facility Association business, as such costs should be reflected in the rates charged by the Facility Association.

Insurers are required to disclose and explain their treatment for any non-recurring expenses (one-time) that creates significant variances in one or more years.

4.f.1. Exposure Variable Expenses (Fixed)

Some expenses can be expected to vary in relationship to the number of units insured (exposures) rather than in relationship to the premium volume.

The specific approach to estimating exposure variable expenses used in the filing should be outlined and details of the calculations should be disclosed. All judgments associated with the process of estimating exposure variable expenses should be disclosed in detail and supported.

Exposure variable expenses should make use of the insurer's own data. Should the insurer find it necessary to rely on outside data or a different source of internal data, the filing must identify the source of the data and provide an explanation of its applicability in the instant circumstance. All data used in the process of estimating exposure variable expenses must be exhibited and labeled.

Exposure variable expenses are subject to trend. The elements of trend discussed in subsection **4.b.2** apply to this subsection as well.

The general approach to estimating exposure variable expenses can be expected to remain reasonably constant over the years for the insurer. Any change in either the approach or the underlying data from the prior rate filing should be disclosed and supported.

4.f.2. Premium Variable Expenses (Variable)

Some expenses can be expected to vary in relationship to the premium volume rather than in relationship to the number of units insured.

The specific approach to estimating premium variable expenses used in the filing should be outlined and details of the calculations should be disclosed. All judgments associated with the process of estimating premium variable expenses should be disclosed in detail and supported.

Premium variable expenses should make use of the insurer's own data. Should the insurer find it necessary to rely on outside data or a different source of internal data to estimate these expenses, the filing must identify the source of the data and provide an explanation of its applicability in the instant circumstance. All data used in the process of estimating premium variable expenses must be exhibited and labeled.

The general approach to estimating premium variable expenses can be expected to remain reasonably constant over the years for the insurer. Any change in either the approach or the underlying data from the prior rate filing should be disclosed and supported.

4.g. Profit Provisions

4.g.1 Underwriting Profit Rates

All insurers must submit their rate indications based on a target underwriting profit rate (i.e., a target profit provision expressed as a percentage of premium), a.k.a., target return on premium ("Target ROP").

More specifically, the Target ROP is expected to represent the target underwriting profit before income taxes for the insurance portfolio being analyzed.

In addition, the Target ROP should represent a profit rate appropriate for direct business (as opposed to assumed or ceded business such as cessions to the Risk Sharing Pool). The Target ROP should also exclude the effect of Facility Association Residual Market to avoid cross-subsidies.

The Target ROP must be clearly stated in the ratemaking formula for the development of the actuarially indicated rate.

Insurers are required to justify the reasonableness of their Target ROP and explain why their selected Target ROP is considered to be appropriate within this filing.

From a qualitative perspective, it is understood that the Target ROP would reflect the reward for bearing the risk.

When setting such assumption, insurers may consider various characteristics of the risks being priced. The following are examples of considerations that insurers may want to comment on to support their assumption:

a) risks with low frequency and high severity would generally deserve a higher Target ROP than risks with high frequency and low severity;

b) long-tail risks with significant uncertainty regarding the settlement patterns would generally deserve a higher Target ROP than short-tail risks with greater certainty in their settlement patterns;

c) risks with a wider probability distribution of outcomes would generally deserve a higher Target ROP than risks with a greater certainty of outcomes;

d) risks subject to recent significant changes increasing the uncertainty of outcomes (e.g., regulatory changes, product design changes, changes in economic environment, market disruptor) may deserve a higher Target ROP than risks from a stable environment;

e) risks included in a highly concentrated insurance portfolio would generally deserve a higher Target ROP than risks included in a highly diversified insurance portfolio; and

f) low surplus funds (capital) availability supporting the risks at high cost would generally deserve a higher Target ROP than well capitalized risks.

Other considerations that could influence the setting of the Target ROP and that insurers may consider commenting on could include, but are not limited to:

a) the relative compensation for investment in non-insurance sectors with similar riskiness;

b) the social mission of the insurer; and

c) the results of quantitative models (e.g., cost of capital).

The specific approach to the determination of the Target ROP underlying the actuarially indicated premium rates in the rate filing must be outlined. All judgments associated with the process of setting the Target ROP must be documented and supported.

In the instance that the target ROP is determined using a quantitative analysis:

- All data used in the process of selecting the Target ROP must be exhibited and labeled.
- The details of the calculations must be disclosed and supported (including formulas and clear definitions of each of the terms used in the formulas).

Insurers that use a cost of capital approach in their rating model must illustrate how the cost of capital is related to the Target ROP in the model steps.

4.g.2 Discounting

Insurers must demonstrate that their actuarial indications reflect the effect of discounting on all elements of the fundamental insurance premium equation, as described in Section 2620.01 of the Standards of Practice of the Canadian Institute of Actuaries, which states:

> "The best estimate present value of cash flows relating to the revenue at the indicated rate should equal the best estimate present value of cash flows relating to the corresponding claim costs and expense costs, plus the present value of a provision for profit, over a specified period of time."

All revenue and costs, including expected claim costs and expense costs, must be discounted to reflect the investment income on policyholder supplied funds before the inclusion of the underwriting profit provision.

The following formula illustrates this requirement:

$$P = L + E_L + (E_F + V \times P) + Q_T \times P$$

Where:

P = Present Value of Premium Collected
L = Present Value of Projected Ultimate Expected Losses
E_L= *Present Value of Projected Ultimate Expected Loss Adjustment Expenses (LAE)*
E_F= *Present Value of Fixed Insurance Operation Expenses (other than LAE)*
V = Variable Underwriting Expenses Rate (as a ratio to Premium)
Q_T= *Target Underwriting Profit Rate (as a ratio to Premium, i.e., Return on Premium)*

The cashflow patterns (e.g., payout patterns) expected to apply to the revenue, losses and expenses should be disclosed and supported for each coverage and sub-coverage.

Insurers must provide the basis of the selected investment return assumptions used in discounting the insurance cashflows (i.e., based on the expected investment income on policyholder supplied funds).

Recognizing the prospective nature of the ratemaking exercise, insurers must support the selected investment return assumption used for discounting by providing the source of their assumption and explaining how the assumption was selected. The insurer should take into consideration new money rates, the insurer's investment philosophy and the investment portfolio assets expected to be held by the insurer on the policyholder supplied funds.

4.g.3 Target and Implied Proposed Underwriting Profit Rate

The general approach to calculating the Target ROPs as well as the approach to selecting the discount rates and cashflow patterns can be expected to remain reasonably constant over the years for the insurer. Any change in either the approach or the underlying data and assumptions from the prior rate filing should be disclosed and supported.

In addition, if the Target ROP in the current rate filing differs from the Target ROP from the previous rate filing, insurers should, for sensitivity testing purposes, provide the alternative indicated provincial indication, by coverage that would have been presented if using the Target ROP from the previous rate filing.

If the proposed rates in the current rate filing are different from those which are actuarially indicated based on the Target ROP, the insurer must provide an estimate of the implied expected underwriting profit rate (i.e., implied return on premium) underlying the proposed rates. The insurer must also explain why it is willing to accept a lower underwriting profit provision than that targeted.

4.h. Credibility

The New Brunswick experience of the insurer may not be of sufficient volume to produce stable overall province-wide rate level indications that are actuarially credible. In such cases, credibility procedures can be useful as a means of augmenting the insurer's New Brunswick data.

The standard for 100% credibility and the formula for calculating partial credibility should be disclosed and supported.

The data source used as the ballast to which the complement of credibility applies should be disclosed and supported.

The approach to credibility (including the credibility standards and complement of credibility) can be expected to remain reasonably constant over the years for the insurer. Any changes from the prior rate filing in the credibility standard or procedure should be disclosed and supported.

4.i. Other Adjustments

Any other adjustments made to the data, which affect expected premium, or losses must be quantified and their effect on the rates must be disclosed and supported in this section.

4.j. Summary Rate Level Indications

Summary sheets must be provided showing how the data combines with the adjustments and provisions outlined in sections **4.b – 4.i**. The insurer may use forms that are relevant to its particular situation.

The indicated rate change should be based on **at least three consecutive years** of the most recent actual experience. An appropriate weight should be applied to each year based on actuarial judgement. If these weights are different from the insurer's prior filing, the change must be disclosed, explained, and supported.

Proposed rate change are expected to be in the same direction and the same relative magnitude as the indicated rate change direction at the coverage level. Explanation should be provided for any significant differences at the coverage level between the indicated and proposed rate changes.

Rationale and other considerations in support of the proposed rate changes must be provided.

4.k. Territorial Indications

The Board acknowledges that companies may wish to define their rating territories differently from the statistical territories defined by the Statistical Plan. The Board has no objection to this practice. However, in reviewing the applications the Board will judge the submission using the following guidelines:

- If a company chooses to deviate from the existing 11 territorial boundaries, they must continue to use these new territorial boundaries for a minimum of three (3) years.
- All territories must be of consistent geographic areas that are contiguous i.e., have a common boundary. Territories are intended to measure risk characteristics such as road conditions, vehicle density, speed limits, crime rates, and terrain and weather conditions. There must be some common underlying characteristics in defining the territory, and therefore it is logical that a territory should be comprised of contiguous geographical areas. A single common point is not considered contiguous.
- In establishing territorial rates, large claims should be capped. So that large claims do not distort the underlying analysis of loss costs, and to avoid rate instability, large claims should be capped, subject to actuarial considerations.
- Any insurer, who defines territories differently from the statistical plan, should show its current rate, proposed rate and the rate change for each of its actual pricing territories AND the existing eleven statistical territories in each rating profile. (See tables 1-4 on Confidential Summary sheet)
- If Canada Post modifies the boundaries of an existing FSA, then the company must file with the Board the manner in which the change in territory definition will be implemented.
- A common territorial definition should be used by an insurer for all coverages. While data should be examined separately by major coverages, there should be a common territorial definition that the insurer uses for all coverages.
- If a company is not using the 11 statistical territories as rating territories, a map must be provided of the company's rating territories.

4.k.1. Indicated Differentials

Territorial indications should be calculated by making use of the insurer's own data. Should the insurer find it necessary to rely on outside data or a different source of internal data, the filing must identify the source of the data and provide an explanation of its applicability in the instant circumstance. All data used in the process of developing territorial indications must be exhibited and labeled.

A comparison of current, indicated, and proposed territorial differentials must be provided for each coverage for which rates are changing by territory. Included in this should be the written premium distribution and the exposure distribution by coverage, by territory.

If credibility procedures are used, they must be disclosed and supported in the same detail as outlined in section **4.h**.

The general approach to calculating territorial differentials can be expected to remain reasonably constant over the years for the insurer. Any change in either the approach or the underlying data from the prior rate filing should be disclosed and supported.

4.k.2. Off-balance

The aggregate premium may be increased or decreased through the introduction of new territorial rates or rate differentials or by changes to existing ones. The filing must account for these changes using off-balance procedures or by accounting for the premium change in its rate level. *In the event that the change in territorial differentials is not off-balanced and instead a rate level change is generated, sections **4.a – 4.j** must be completed.*

All data used in the process of calculating the off-balance must be exhibited and labeled. The calculation of the off-balance amount must be shown. All judgments associated with the process of calculating the off-balance should be disclosed and supported.

Off-balance calculations should make use of the insurer's own distribution of business. Should the insurer find it necessary to rely on outside data or a different source of internal data, the filing must identify the source of the data and provide an explanation of its applicability in the instant circumstance.

The general approach to calculating the off-balance can be expected to remain reasonably constant over the years for the insurer. Any change in either the approach or the underlying data from the prior rate filing should be disclosed and supported.

4.k.3. Territorial Definition Changes

A map clearly showing current and proposed territorial boundaries must accompany any changes to territorial definitions**.**

4.l. Classification/Limit of Liability/Deductible or Other Rate Differential Indications

4.l.1. Indicated Differentials

If the insurer is requesting changes in classification differentials, limit of liability differentials, deductible differentials, or other rate differentials, the ratemaking process must be outlined in detail.

Classification, limit of liability, deductible, and other rate differential indications should make use of the insurer's own data. Should the insurer find it necessary to rely on outside data or a different source of company data, the filing must identify the source of the data and provide an explanation of its applicability in the instant circumstance. All data used in the process of developing classification, limit of liability, deductible, or other rate differential indications must be exhibited and labeled.

A comparison of current, indicated, and proposed differentials must be provided for each coverage for which classification, limit of liability, deductible, or other rate differentials are changing. Included in this should be the written premium distribution and the exposure distribution by classification, limit of liability, deductible or other rate differential.

If credibility procedures are used, they must be disclosed in the same detail as outlined in section **4.h**.

The general approach to calculating rate differentials can be expected to remain reasonably constant over the years for the insurer. Any change in either the approach or the underlying data from the prior rate filing should be disclosed and supported. The insurer should test for and avoid reversals in its proposed differentials.

4.l.2. Off-balance

The aggregate premium may be increased or decreased through the introduction of new classification, limit of liability, deductible, or other rate differentials or by changes to existing ones. The filing must account for these changes using off-balance procedures or by accounting for the premium change in its rate level. *In the event that the change in classification, limit of liability, deductible, or other rate differentials is not off-balanced and instead a rate level change is generated, sections **4.a. – 4.j.** must also be completed.*

All data used in the process of calculating the off-balance must be exhibited and labeled. The calculation of each off-balance must be shown. All judgments associated with the process of calculating the off-balance should be disclosed and supported.

Off-balance calculations should be based on the insurer's own distributions of business by classification, limit of liability, deductible, or other rate differential. Should the insurer find it necessary to rely on outside data or a different source of internal data, the filing must identify the source of the data and provide an explanation of its applicability in the instant circumstance.

The general approach to calculating the off-balance can be expected to remain reasonably constant over the years for the insurer. Any change in either the approach or the underlying data from the prior rate filing should be disclosed and supported.

4.m. Discount/Surcharges

4.m.1. Indicated Discounts or Surcharges

The ratemaking process must be outlined in detail where an insurer proposes to introduce or make changes to the amount or value of a discount (except a group discount which is to be disclosed in section **4.n**) or surcharge.

The insurer's own loss data should be used to the extent possible. The filing must clearly indicate the basis for the discount or surcharge. The insurer must have appropriate information to support the discount or surcharge. If the insurer finds it necessary to rely on outside data or a different source of company data, the insurer must identify the source of the data and provide an explanation of its applicability. All data used in the process of developing the indicated discounts or surcharges should be exhibited and labeled.

A comparison of current, indicated and proposed discounts or surcharges must be provided for each coverage when a change is proposed. Included in this should be the written premium distribution and the exposure distribution by discounts or surcharges.

If credibility procedures are used, they must be disclosed in the same detail as outlined in section **4.h**.

If no changes to discounts/surcharges are proposed in the filing, insurers must still list all existing discounts and surcharges (including expense-based discounts and group discounts, if applicable).

A current and proposed distribution of the insurer's book of business that is affected by the discount or surcharge change must be provided to determine the average premium changes (shift). All assumptions and detailed calculation must be provided to support the rate level change.

The general approach to calculating discounts or surcharges can be expected to remain reasonably constant over the years. Any change in either the approach or the underlying data from the prior rate filing should be disclosed and supported.

4.m.2. Off-balance

The aggregate premium may be increased or decreased through the introduction of new discounts or surcharge, or by changes to existing ones. The filing must account for these changes using off-balance procedures or by accounting for the premium change in its rate level. *In the event that the change in discount or surcharge is not off-balanced and instead a rate level change is generated, sections **4.a. – 4.j.** must be completed.*

All data used in the process of calculating the off-balance must be exhibited and labeled. The calculation of each off-balance must be shown. All judgments associated with the process of calculating the off-balance should be disclosed and supported.

Off-balance calculations should be based on the insurer's own distribution of business for discounts or surcharges. Should the insurer find it necessary to rely on outside data or a different source of internal data, the filing must identify the source of the data and provide an explanation of its applicability in the circumstances.

The general approach to calculating the off-balance can be expected to remain reasonably constant over the years. Any change in either the approach or the underlying data from the prior rate filing should be disclosed and supported.

4.n. Rating Based on Group Membership

4.n.1. Indicated Discounts or Rates for Groups

The ratemaking process must be outlined in detail where an insurer proposes to introduce or make changes to:

- a discount or schedule of rates based on membership in a group; or
- discounts or a schedule of rates that vary among groups.

A discount or a schedule of rates based on group membership could be based on lower (higher) loss costs based on (un)favorable experience, or risk management programs, or identifiable characteristics of a group that would result in lower or higher loss exposure or lower expenses based on lower administrative expense or lower acquisition cost.

Insurers should maintain separate premium and loss statistics to support a discount or schedule of rates based on group membership. The basis of the discount or surcharge should be defined in sufficient detail so that naming individual organizations is not necessary. Insurers are **not** expected to develop a unique discount or schedule of rates for a specific group unless such a group is of sufficient size that its own experience supports such a discount or schedule of rates. Support for discounts and rates must be actuarially credible and therefore only in the instance of large groups would a unique discount or schedule of rates be appropriate. In the case where more than one discount is proposed, (e.g., variation of discounts based on types of groups), a list of groups and discounts applicable is required to be submitted with the filing, as well as on a periodic basis. Insurers should complete a regular compliance review of group business to ensure that the business continues to qualify as a group and that the group discount or schedule of rates continue to be supported.

The insurer's own loss data should be used to the extent possible. If the insurer finds it necessary to rely on outside data or a different source of company data, the insurer must identify the source of the data and provide an explanation of its applicability. All data used in the process of developing the indicated discounts or surcharges based on group membership should be exhibited and labeled.

A comparison of current, indicated and proposed discounts or schedule of rates must be provided for each coverage when a change is proposed. Included in this should be the written premium distribution and the exposure distribution by discounts or schedule of rates.

If credibility procedures are used, they must be disclosed in the same detail as outlined in section **4.h**.

The general approach to calculating discounts or rates based on group membership can be expected to remain reasonably constant over the years. Any change in either the approach or the underlying data from the prior rate filing should be disclosed and supported.

4.n.2. Off-balance

The aggregate premium may be increased or decreased through the introduction of new discounts or rates, or by changes to existing ones. The filing must account for these changes using off-balance procedures or by accounting for the premium change in its rate level. *In the event that the change in discount or surcharge is not off-balanced and instead a rate level change is generated, sections **4.a. – 4.j.** must be completed.*

All data used in the process of calculating the off-balance must be exhibited and labeled. The calculation of each off-balance must be shown. All judgments associated with the process of calculating the off-balance should be disclosed and supported.

Off-balance calculations should be based on the insurer's own distribution of business for group discounts or schedule of rates. Should the insurer find it necessary to rely on outside data or a different source of internal data, the filing must identify the source of the data and provide an explanation of its applicability in the circumstances.

The general approach to calculating the off-balance can be expected to remain reasonably constant over the years. Any change in either the approach or the underlying data from the prior rate filing should be disclosed and supported.

SECTION 5: FINAL RATES/RATE LEVEL CHANGE

Exhibits illustrating current and proposed rating algorithms, base rates, discounts/surcharges, and differentials, clearly identified as either current or proposed, must be disclosed in this section, including any explanatory material in support of the proposed changes. To facilitate the review process, all of 5.a. - 5.d. must be included even though the change may be to only one of the elements.

5.a. Algorithm

Exhibits illustrating current and proposed algorithms for all coverage, including discounts and surcharges and 6-month policy adjustment factor (if applicable) must be disclosed in this section.

5.b. Base Rates

Exhibits illustrating current and proposed base rates must be disclosed in this section. Provide a side-by-side comparison of current versus proposed base rates in Excel format.

5.c. Differentials

Exhibits illustrating current and proposed differentials must be disclosed in this section. Provide a side-by-side comparison of current versus proposed differentials in Excel format.

5.d. Discounts and Surcharges

Exhibits illustrating all current and proposed discounts and surcharges for each applicable coverage must be disclosed in this section.

5.e. Calculation of Final Rates

The filing must clearly describe and show how current base rates by coverage are transformed into proposed base rates through the filing of the proposed rate change in combination with any off-balance.

5.f. Calculation of Rate Level Change and Average Rate

The filing must clearly describe and show how the rate level impact of changes to base rates, differentials and discounts or surcharges, in combination with any off-balance which may be applied, are used to calculate the overall rate level change on a per coverage basis.

5.g. Dislocation and Rate Capping

Capping of rates is a tool that insurers employ to limit dislocation of premium and, thereby, improve retention where revisions to rating programs create substantial changes in the distribution of premium among risk profiles. The principal causes of such dislocation are revision of relativities for existing rating variables or introduction of a new algorithm with new rating variables, though it could relate to acquisition of a portfolio.

SECTION 6: PROPOSED MANUAL PAGES CONTAINING REVISED RATES AND RATING PROGRAM

A proposed set of manual pages with rating rules, discounts, surcharges or definition changes must be provided with the filing. A set of manual pages that contain the rates by territory and class, driving record, etc. is required at any time **UPON THE REQUEST** of the Board.

Any changes or additions to the rating rules, definitions or text in the proposed rate manual should be denoted by a sidebar.

SECTION 7: RATING EXAMPLES (Profiles) ONLY UPON REQUEST

Each insurer must file with the NBIB, when requested, those rating examples that would be affected by the filing. Also, the NBIB may require additional and/or different rating examples as a consequence of the review process. The rating examples must be provided in Excel format.

The rating examples must be completed according to the risk description specified. Each insurer must provide both current and proposed rating criteria for each of the rating examples as required.

Any additional information pertaining to the rating example must be disclosed with a detailed description for each affected rating example.

Specific instructions and key assumptions that should be adopted when completing these rating examples are:

- All rates are to be stated on an annual basis. If annual policies are not issued, the rates should be converted to an annual basis.
- All risks should be rated strictly according to the information provided. DO NOT provide preferred rates unless the criteria as stated fit the eligibility rules for a preferred class. If so, provide only the preferred rates, and state so.
- Clearly identify all applicable surcharges/discounts that apply to each coverage.

SECTION 8: FINAL FILING

Once an insurer has received approval of its filing from the NBIB, and if there have been any amendments to the filing through the review or approval process, companies must submit within 30 calendar days, an electronic copy of the complete filing (Final Filing). A Final Filing is **required only if there have been amendments** to the filing through the review or approval process, please advise the Board via email if a Final Filing will not be filed.