Nebraska Filing Requirements Model-Dependent P&C SERFF Filings Initially Submitted after July 31, 2020

Complete Filings and Expedited Review

"All supporting information relating to a rating system" is required to be filed or incorporated by reference, per Neb. Rev. Stat. § 44-7508(4). To receive expedited review for a model-dependent rate filing, the rate filer must:

- Disclose each model's proposed role in the rating system in the Filing Description on the SERFF General Information tab, and
- Provide a signed actuarial (ACAS or FCAS) opinion asserting that:
 - > The filing includes all supporting information relating to proposed model usage,
 - Such supporting information is clearly presented, and
 - In its details, the proposed rating system complies with each of the six requirements listed in <u>Neb. Rev. Stat.</u> § 44-7508(9).

Explain and support each model on which the rating system depends. "All supporting information" as defined below may be set forth in any combination of narrative and/or exhibits:

- Identify the type of model (e.g. Generalized Linear Model GLM, decision tree, Generalized Bayesian Model, neural network, etc.), describe its role in the rating system, and provide the reasons why that type of model is an appropriate choice for that role.
- Provide the formula relationship between the data and the model outputs, with a
 definition of each model input and output. If the model includes offset variables, identify
 and explain. Does the model estimate loss ratios, pure premiums, frequency/severity, or
 something else?
- Identify data sources, listing the data elements available from each source. Identify the data elements selected for use in the model. Define each predictor variable used in the model.
- Disclose reliance on data, models, and/or other information supplied by others. If using catastrophe model output, identify the vendor and the model settings/assumptions used. If using output of scoring algorithms, provide a list of the variables used in the score and the source of the data used to calculate the score.
- Explain procedures used to merge data from different sources.
- Document the process for reviewing the appropriateness, reasonableness, consistency, and comprehensiveness of the data. Disclose material findings from the data review and identify any potential material limitations, defects, or unresolved concerns found or believed to exist in the data.
- Describe any procedures or filters that had the effect of excluding or adjusting any of the
 observed data prior to the model fitting process. Adjustments or modifications made to
 the data would include trending, development, exclusion of catastrophe losses, capping
 individual claims, deletion of anomalous observations, techniques to deal with missing
 data, etc.. Provide reasons for such adjustments and modifications.
- Identify the software used to build and fit the model to the data.
- Describe the methods used to assess the statistical significance/goodness-of-fit of the model, such as lift charts, statistical tests, and holdout samples. Include comparison of modeled projections to historical actual results, to demonstrate that modeled projections bear a reasonable relationship to actual results. Explain how this evidence supports proposed use of the model in the rating system.

Nebraska Filing Requirements Model-Dependent P&C SERFF Filings Initially Submitted after July 31, 2020

- How are the model outputs used within the rating system? Show and explain any calculations, judgments and adjustments to the model output before its incorporation in the rating system.
- If the filing support includes first-time use of a model, an update to a prior model or replacement with a different model, identify and explain the changes in calculations, assumptions, parameters and data.
- Measure and describe the proposed impacts on expiring policies, and describe the process used by management to evaluate and mitigate those impacts.

Specified Nebraska filing documents can be excluded from public record only if confidential treatment is granted consistent with <u>Neb. Rev. Stat.</u> § 84-712.05(3). Review the permissible arguments as explained in "Confidentiality Guidelines for Property & Casualty Insurance Filings in SERFF," found among SERFF Filing Rules for Nebraska.

Incomplete Model-Dependent Filings

Filings (including model-dependent filings) must be reviewed as soon as reasonably possible after submission, with a 30-day limit that can be extended 30 days by written notice, per Neb. Rev. Stat. §§ 44-7508(9) & 44-7508(10). A technical review to simply ensure the filing includes all required supporting information can become open-ended and subject to interruptions. If necessary, the Department may:

- At any time before the statutory 30-day review period has ended, send written notice extending the review period by not more than an additional 30 days, per <u>Neb. Rev. Stat.</u> § 44-7508(10).
- Review details to describe missing information, and request additional information per Neb. Rev. Stat. § 44-7508(4). Rate filers might expect any requests for additional information to cite the Complete Filings criteria listed above. Per Neb. Rev. Stat. § 44-7508(4), the statutory 30-day or extended review period is to commence when the requested information has been received.
- If additional information was requested in writing, and not received within 60 days, the filing may be disapproved.
- Disapproval is required under any combination of six conditions specified in <u>Neb. Rev. Stat.</u> § 44-7508(9).