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May 1, 2013

Mr. William Kox
Deputy Administrator
Division of Insurance Services
Wisconsin Department of Employee Trust Funds
Madison, WI 53707

## Re: Aflac Proposals to Provide Accidental Injury or Critical Illness Benefits

Dear Bill:

The State of Wisconsin Department of Employee Trust Funds (ETF) has requested that Deloitte Consulting LLP (Deloitte Consulting) review the voluntary insurance coverage proposals provided by the American Family Life Assurance Company (Aflac) for covered critical illnesses and accidents that provide participants with specific benefit payments in the event of diagnosis of specified accidental injuries or critical illnesses. Our review relates to the assumptions provided by Aflac with respect to these voluntary coverages, and the circumstances by which premium rates may change in the future for participants.

### Insurance Proposal Descriptions

Aflac has provided insurance contract proposals for:

- Non-participating group accidental injury (per schedule of accidental injuries)
- Group critical illness (per specific list of illnesses)

The following summarizes the coverages provided under these voluntary group plans; refer to the complete proposals for full descriptions of the benefits provided and the terms of insurance.

Group Accidental Coverage: This coverage is available to employees and their dependents, and provides specific cash benefits per a scheduled list of accidental injuries (no benefits are payable for loss due to sickness). While the schedule of accidental injuries is the same for employees and dependents, the schedules of benefits payable differ in some cases. The benefits payable are not based on the actual health care costs incurred (though per diem benefits payable are based on the number of days of hospitalization, etc.), rather are fixed amounts per the schedule.

Participation in the plan is renewable each year, and coverage continues as long voluntary premiums are paid and the master group policy remains in force.

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Group Critical Illness: This coverage is available to employees and spouses and dependent children. The coverage provides a fixed payment based on the amount of coverage elected, and is payable upon the first diagnosis of each covered critical illness:

- Cancer
- Heart attack
- Major organ transplant
- Renal failure (end stage)
- Stroke
- Carcinoma in situ
- Coronary artery bypass surgery
- Advanced Alzheimer's
- Benign brain tumor
- Advanced Parkinson's disease

Diagnoses of certain of the above illnesses will pay less than 100% of the elected benefit's face value. Multiple diagnoses separated by more than 6 months of different critical illness will result in multiple payments of the elected benefit amount.

Coverage for spouses must be actively elected, and the elected benefit amount cannot exceed 50% of the elected benefit amount for the employee. Coverage for dependent children at 50% of the primary insured amount is provided at no additional cost.\

Spouse-only coverage is not available, dependent child only coverage is not available.

Participation in the plan is renewable each year, and coverage continues as long voluntary premiums are paid and the master group policy remains in force.

### A.M. Best Rating

A.M. Best Company[1] has issued an opinion on the financial strength of Aflac, and has affirmed the financial strength rating of A+. Appendix A provides the complete A.M. Best review.

### Loss Ratios

Per the requirements of the Group Insurance Board's guidelines for optional plans, the optional plan must maintain a loss ratio of at least 75%. Aflac has agreed to this

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[1] A.M. Best Company is a global full-service credit rating agency dedicated to serving the insurance industry. It began assigning credit ratings in 1906, making it the first of today's rating agencies to use symbols to differentiate the relative creditworthiness of companies.

Best's Credit Ratings are independent opinions regarding the creditworthiness of an issuer or debt obligation. Best's Credit Ratings are based on a comprehensive quantitative and qualitative evaluation of a company's balance sheet strength, operating performance and business profile, or, where appropriate, the specific nature and details of a debt security.

anticipated loss ratio for each of the accidental injury and critical illness proposals, though the anticipated loss ratio for the critical illness coverage is over the lifetime[2] of the plan, not on an annual basis. Additional information regarding loss ratios is provided in Appendix B. The application of this anticipated minimum loss ratio, however, differs between the accidental injury and critical illness coverages.

Industry-wide practices target loss ratios for these coverages have remained fairly stable over the last 10 years between 50% and 55%[3]. The 75% Aflac anticipated minimum lifetime loss ratio for each coverage, therefore, represents a more advantageous pricing arrangement to the State of Wisconsin employees than would otherwise be available to the market at large.

<u>Group Accidental Coverage:</u> This coverage is essentially a one-year term coverage, with the rates established each year such that an anticipated minimum annual 75% loss ratio is achieved. In other words, each year the plan expects to pay out 75¢ for every $1 of premium received.

The premiums have been established based on Aflac's assumed expected claims each year per their historic book of business experience. While assumed annual policy lapse rates are included in this anticipated minimum loss ratio proposal, these lapse rates do not enter into the development of the premium. Premium rates differ based on coverage tier selected (Employee Only, Employee and Spouse, Employee and Dependent Children, and Family) and benefits payable (Low versus High). Based on the rate making process exhibit provided, it appears that the 75% anticipated minimum loss ratio is applicable separately for each of the above coverage tier and benefits payable combinations (i.e., 8 different rating groups) rather than in aggregate across all coverage tiers and benefits payable amounts. Rates would be adjusted each year to reflect ongoing Wisconsin-specific experience to maintain the 75% anticipated loss ratio required under the Board's Guidelines.

<u>Group Critical Illness:</u> The estimation of the anticipated lifetime loss ratio for this coverage is performed over the expected true lifetime coverage (as projected over 30 years), with annual loss ratios differing (sometimes significantly) from the 75% lifetime level. As such, this coverage is essentially a "whole life" coverage, with the rates established each year such that an anticipated minimum lifetime 75% loss ratio is maintained. This "lifetime" pricing arrangement is typical in the marketplace.

While a 30-year horizon is common in the industry for estimating the lifetime loss ratio for a critical illness policy, plans that are terminated early experience lower lifetime loss

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[2] For the critical illness plan, Aflac's rate making process illustrative exhibit uses a 30-year timeframe to represent the coverage's "lifetime".

[3] A Society of Actuaries survey from 2001 indicated an average market loss ratio of 56%. An ING Re critical illness survey from 2003 reported an average market loss ratio of 55%, with 70% of the survey respondents reporting loss ratios between 40% and 55%, and only 10% reporting loss ratios at 60% or higher. Finally, a February 2013 discussion with critical illness actuaries within Aon-Hewitt indicated that the 50% - 55% target loss ratio was still common in the market.

ratios. If the Board terminated the policy after 10 years, the average expected lifetime loss ratio for those employees who participated since the policy's inception would be below the Board's 75% loss ratio guideline for optional insurance.

The annual premiums have been established based on Aflac's assumed expected claims each year per their aggregate historic book of business experience and assumed lapse rates each year. Expected claims each year vary based on:

- Employee or spouse age
- Non-tobacco versus tobacco status as of the initial date of coverage
- Benefit amount selected

Although Deloitte Consulting did not audit or otherwise validate Aflac's assumed lapse rates and claims incidence rates relative to their own historical experience, based on our review we did find those assumptions to be reasonable. In reviewing Aflac's assumed lapse rates and incidence of claims rates versus published actuarial studies of lapse rates and loss ratios, Deloitte Consulting observed the following:

- An actuarial study published in 2001[4] that covered seven years of critical illness claims showed a first year loss ratio if approximately 31% (ranging from a low of 27% to a high of 39%), a second year loss ratio of approximately 46% (ranging from a low of 40% to a high of 67%), and an average subsequent loss ratio of 55% (ranging from a low of 53% to a high of 63%).

  These loss ratios were reflective of the combined lapse rates and incidence of claims rates for the covered groups, and are slightly higher than those assumed by Aflac (after adjusting for the difference between the actuarial study's lifetime 55% average loss ratio and the Aflac proposal's lifetime 75% loss ratio).

- A 2003 ING Re survey of fifteen critical illness insurers showed average group policy lapse rates in year 1 of 29% (based on a range of 15% to 43%, versus Aflac's 22%), 23% in year 2 (based on a range of 15% to 30%, versus Aflac's 19%), and 18% on average for years 3 - 5 (based on a range of 15% to 20%, versus Aflac's 16%). Aflac's assumed lapse rates are consistent with those seen elsewhere in the critical insurance industry.

It thus appears that the assumed Aflac lapse rates are consistent with those observed elsewhere in the industry, while the claim incidence rates assumed by Aflac are lower than those reported in the survey (which may simply be a reflection of different eligible critical illnesses).

Premium rates do not differ based on employee versus spouse status. Aflac has indicated that no information is available on how assumed lapse rates or book of business claims incidence rates differ by the above factors.

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[4] Society of Actuaries, Health Section News, "Overview of Critical Illness Claims Experience", April 2001.

The minimum lifetime loss ratio for the critical illness coverage is based on individual annual loss ratios which are low in the initial years and high by year 30. Since anticipated early year loss ratios are less than 75%, this coverage would generate reserves that Aflac would presumably hold in order to cover claims in the later years where the loss ratio is greater than 75%.

Aflac is not willing to propose rates that would be at the 75% target loss ratio for each year for the critical illness coverage, since such rates would require significant rate increases in early years to maintain the annual 75% target loss ratio, which would presumably erode participation persistency. There would be fairly level rate increases at about double the rate of CPI in the in years 10-20, and increases near the rate of CPI after that. The initial year 1 critical illness premium rate for a year 1 anticipated 75% loss ratio would be less than that proposed by Aflac under an anticipated 75% lifetime loss ratio arrangement. The table that follows illustrates the hypothetical rate increases that would be necessary under a level 75% anticipated annual loss ratio arrangement:

| Policy Years | Average Annual Rate Increase |
|---|---|
| 2 - 5 | 17.6% |
| 6 - 10 | 9.1% |
| 11 - 15 | 6.7% |
| 16 - 20 | 6.0% |
| 21 - 25 | 3.9% |
| 26 - 30 | 3.6% |

The anticipated lifetime loss ratio of 75% is based on a present value asset/liability matching analysis over the 30-year period reflective of premiums received versus claims paid. As of the date of the Aflac critical illness proposal (December 14, 2012), an assumed 3% discount rate was used to estimate the anticipated lifetime loss ratio. A higher discount rate assumption would result in a lower anticipated loss ratio, and a lower discount rate assumption would result in a higher anticipated lifetime loss ratio.

According to prevailing high-quality corporate bonds available as of December 14th, 2012, Deloitte Consulting had estimated that a discount rate assumption of 3.5% most accurately represents the matched asset/liability cash flows, which produces an anticipated lifetime loss ratio of 73.9%.

High-quality corporate bond rates as of February 28th, 2013, have increased such that a discount rate of 3.8% now most accurately represents the matched asset/liability cash flows, producing an anticipated lifetime loss ratio of 73.0%. If the Board accepts the Aflac critical illness coverage proposal, including the use of an anticipated lifetime loss ratio (rather than an annual loss ratio) of 75%, an additional discussion may be warranted to see if Aflac would be willing to decrease the quoted premium rates by 2.7% in order to once again meet the required anticipated lifetime minimum loss ratio of 75%.

## Premium Rates and Rate Change Scenarios

The premium rates proposed by Aflac for each of the accidental injury and critical illness policies represent their expected lapse rates and claims incidence rates, and are not expected to change over the lifetimes of these policies. To the extent by which actual claims experience and/or lapse rates, however, differ from those initially assumed, annual rate renewals may reflect proposed rate changes by Aflac which will need to be accepted or declined by the Board.

Assuming claims experience and lapse rates emerged as expected, the premium rates for these coverages would remain in effect for the duration of participation for each enrollee. Thus, for the critical illness coverage (which has rates that vary by age), the rate applicable to a 25-year old at original enrollment would remain fixed throughout that enrollees participation, regardless of his/her subsequent age changes. Additional coverage, however, would be based on the attained age of the enrollee at that time.

If actual experience is worse than expected, subsequent rate changes would be equally applicable to both existing and new coverage certificates.

If actual experience is more favorable than expected, Aflac has indicated that they would either reduce premiums or enhance benefits.

We would expect that an annual reconciliation would be provided by Aflac, including claims payments and lapse rates, in order to allow for the ongoing assessment of expected rate action (either up or down).

It should be noted that Aflac provided in its proposal numerous benefit amount options for the critical illness coverage (nontobacco versus tobacco users, in amounts between $5,000 and $50,000 for employees, and between $5,000 and $25,000 for spouses) and both “low” and “High” options under the accidental injury coverage. If it was decided to limit the number of benefit amount options (e.g., just $5,000, $10,000, and $20,000 for the critical illness coverage, and/or just the “Low” coverage under the accidental injury coverage) the comments and conclusions in this report would still stand.

Deloitte Consulting posed several rate action questions to Aflac to better understand the rating process. Appendix C provides a summary of those questions and the respective answers provided by Aflac.

## Summary

Aflac is a highly rated insurance company per A.M. Best, with a reasonable expectation of continued operation. Its financial solvency is considered very strong with respect to paying claims and providing customer service.

Assuming its lapse rates and claims incidence rates are reasonable (and comparison against available published surveys indicate that the assumed lapse rates are consistent with industry assumptions, while the claims incidence rates are slightly less), the premiums proposed reflect anticipated lifetime loss rations of approximately 75%, a level considerably higher than the average 50% to 55% seen in the marketplace. Aflac

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has reserved the right to conduct annual rate reviews after the two-year initial rate guarantee period (with up or down) to maintain these 75% anticipated lifetime loss ratio levels, though has indicated that such reviews and potential rate changes for its existing book of business are not common.

It is suggested that ETF actively monitor experience under each of the accidental injury and critical illness policies to assess actual emerging loss ratio experience and request rate actions accordingly to maintain the minimum 75% desired loss ratio levels if necessary.

It should also be noted that, per the Aflac proposals, the plans can be terminated by Aflac in the event of non-payment of premium or if the coverage enrollment falls below certain threshold levels. Additionally, both Aflac and the State of Wisconsin have the right to terminate the master group contract.

It is expected that Aflac will provide experience reports in support of monitoring actual loss ratios.

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It should be recognized that because future events frequently do not occur exactly as expected, there are usually differences between projected and actual results. For example, actual experience may differ from assumptions, including but not limited to those for claim costs, trends and non-benefit expenses. Accordingly, there can be no assurance that the ETF's actual experience will match the estimates provided by Aflac.

Once you have had an opportunity to review this information, please do not hesitate to contact me at (312) 486-0200 or via e-mail at dplante@deloitte.com with any questions.

Sincerely,

Daniel R. Plante, ASA, FCA, MAAA

cc: Timothy D. Gustafson, FSA, MAAA