Athene Life Re Ltd. Financial Condition Report

For the twelve (12) month period ending 31st December 2018

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This Report contains references to information contained in the Athene Holding Ltd. Form 10-K filed with the Securities and Exchange Commission in accordance with the Securities Exchange Act of 1934, as amended, and references to the Athene Life Re Ltd. Financial Statements and other information as posted on its website. These references are for the readers' convenience only. In the event that any information contained herein conflicts with the Form 10-K or any other publicly disclosed documents, such conflict is unintended, and the publicly disclosed documents shall control.

1. EXECUTIVE SUMMARY

This financial condition report ("**FCR**") for Athene Life Re Ltd. ("**ALRe**", the "**Company**", "**we**" or "**our**") is produced in accordance with the Insurance (Public Disclosure) Rules 2015 (the "**Rules**") under the Bermuda Insurance Act 1978 (the "**Act**"). This outlines the financial condition of ALRe as at December 31, 2018. The FCR contains qualitative and quantitative information of ALRe's business and performance, governance structure, risk profile, solvency valuation and capital management.

ALRe is a leading retirement services company and is the direct or indirect parent of several other Bermuda based insurers in the Athene group. The Company is ultimately owned by Athene Holding Ltd. ("**AHL**", or the "**Parent**"), a Bermuda exempted company. ALRe reinsures business from both third party cedants and its affiliates.

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2. DECLARATION

Declaration on the Financial Condition Report

We, the undersigned, declare that to the best of our knowledge and belief, the financial condition report fairly represents the financial condition of the Company in all material respects as at December 31, 2018.

Frank L. Gillis
Chief Executive Officer
Athene Life Re Ltd.

Barry McDonald
Chief Risk Officer
Athene Life Re Ltd.

3. COMPANY BACKGROUND INFORMATION

ALRe, a Bermuda exempted company, together with its subsidiaries, is a leading retirement services company. We conduct business primarily through the following consolidated subsidiaries:

- Our non-U.S. reinsurance subsidiaries, to which ALRe's other insurance subsidiaries and third-party ceding companies directly and indirectly reinsure a portion of their liabilities, including ALRe; and
- Athene USA Corporation, an Iowa corporation (together with its subsidiaries, Athene USA) which primarily issues retirement savings products.

ALRe is wholly owned by AHL, a publicly traded Bermuda exempted company.

The Company produces its financial statements in accordance with U.S. Generally Accepted Accounting Principles ("**GAAP**").

4. BUSINESS AND PERFORMANCE

a. Name of Insurer

Athene Life Re Ltd.

b. Supervisor

The Insurance Supervisor for the Company is:
The Bermuda Monetary Authority ("**BMA**")
BMA House
43 Victoria Street, Hamilton
Bermuda
(441) 295-2758

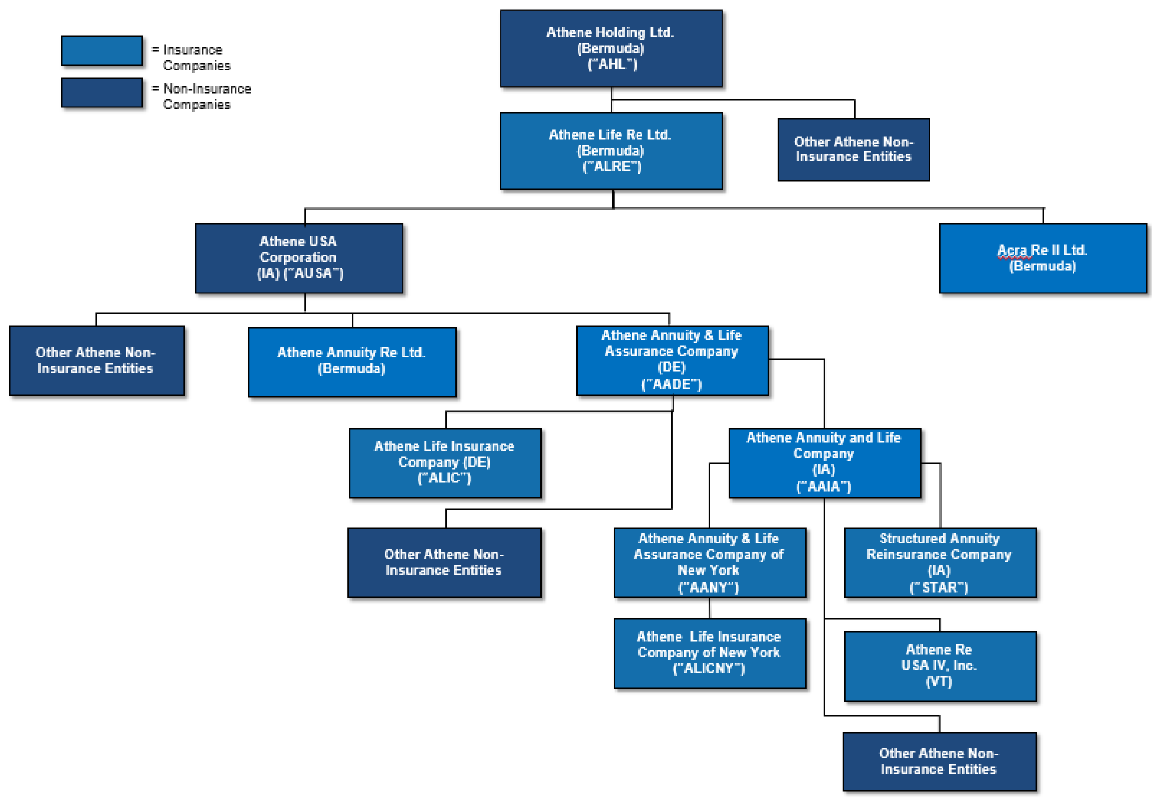
c. Approved Auditor

PricewaterhouseCoopers Ltd.
P.O. Box HM1171
Hamilton HM EX, Bermuda

d. Ownership Details

The Company is a wholly owned subsidiary of AHL, whose Class A common shares are listed on the New York Stock Exchange (symbol: ATH).

e. Group Structure[1]



f. Insurance Business Written by Business Segment and Geographical Region

i. Gross Premium Written by Business Segment for the Reporting Period

Consistent with our parent company AHL, ALRe has just one reportable re/insurance business segment 'Retirement Services' and all product types are written in this segment.

ii. Gross Premium Written by Geographical Region for the Reporting Period

ALRe reinsures retirement savings products that originate in all 50 U.S. states and the District of Columbia.

[1] As of 31 December 2018. Please note Athene Co-Invest Reinsurance Affiliate 1A Ltd. changed its name from Athene Co-Invest Reinsurance Affiliate 2A Ltd. effective April 5, 2019 and, prior to that, from Acra Re II Ltd. effective February 28, 2019.

g. Performance of Investments and Material Income and Expenses Incurred for the Reporting Period

i. Performance

Net Investment Income—Net investment income by asset class consists of the following:

(In millions)	Years ended December 31, 2018	2017	2016
AFS securities	$ 2,840	$ 2,497	$ 2,214
Trading securities	200	200	236
Equity securities	12	9	8
Mortgage loans	457	369	352
Investment funds	234	206	175
Funds withheld at interest	492	148	82
Other	109	62	43
Investment revenue	4,344	3,491	3,110
Investment expenses	(356)	(320)	(298)
Net investment income	$ 3,988	$ 3,171	$ 2,812

ii. Material Income & Expenses for the Reporting Period

(In millions)	Years ended December 31, 2018	2017	2016
Revenues			
Premiums (related party: 2018 – $679, 2017 – $0 and 2016 – $0)	$ 3,368	$ 2,286	$ 54
Product charges (related party: 2018 – $34, 2017 – $0 and 2016 – $0)	449	340	281
Net investment income (related party investment income: 2018 – $542, 2017 – $217 and 2016 – $224; and related party investment expense: 2018 – $350, 2017 – $315 and 2016 – $297)	3,988	3,171	2,812
Investment related gains (losses) (related party: 2018 – $(23), 2017 – $(16) and 2016 – $(38))	(1,338)	2,442	610
Other-than-temporary impairment investment losses			
Other-than-temporary impairment losses	(24)	(20)	(32)
Other-than-temporary impairment losses reclassified to (from) other comprehensive income	6	(4)	2
Net other-than-temporary impairment losses	(18)	(24)	(30)
Other revenues	21	29	36
Revenues of consolidated variable interest entities			
Net investment income (related party: 2018 – $55, 2017 – $42 and 2016 – $44)	56	42	67
Investment related gains (losses) (related party: 2018 – $(21), 2017 – $35 and 2016 – $(25))	(18)	35	(53)
Total revenues	6,508	8,321	3,777
Benefits and expenses			
Interest sensitive contract benefits (related party: 2018 – $63)	290	2,842	1,334
Amortization of deferred sales inducements	54	63	39
Future policy and other policy benefits (related party: 2018 – $707)	4,187	2,953	773
Amortization of deferred acquisition costs and value of business acquired	174	344	304
Dividends to policyholders	37	51	39
Policy and other operating expenses (related party: 2018 – $6, 2017 – $6 and 2016 – $7)	518	446	431
Operating expenses of consolidated variable interest entities	1	—	13
Total benefits and expenses	5,261	6,699	2,933
Income before income taxes	1,247	1,622	844
Income tax expense (benefit)	122	105	(53)
Net income	$ 1,125	$ 1,517	$ 897

See accompanying notes to consolidated financial statements

h. <u>Any other Material Information</u>

None.

5. GOVERNANCE STRUCTURE

The Company has established a corporate governance framework designed to support its core values of transparency, accountability and integrity.

a. <u>Board and Senior Executive</u>

i. Board and Senior Executive Structure, role, responsibilities and segregation of responsibilities

The business and affairs of the Company are overseen by the Company's Board of Directors ("**Board**"). The Board maintains responsibility for the management, strategic direction and long-term performance of the Company.

The Board is responsible for overseeing that the Company's strategy and policy are executed in accordance with both its strategic plan and the longer-term strategy established at the AHL level for AHL and its subsidiaries ("**Group**"). Together, the Board and the AHL Board of Directors (the "**AHL Board**") guide and monitor the business affairs of the Company.

The Board currently consists of 6 directors, of which 3 are executive directors and 3 are non-executive directors. Their roles and responsibilities are outlined in the Company's Board Governance Guidelines and byelaws.

Executive, Audit, Nominating and Corporate Governance, Risk, Compensation and Conflicts Committees have been constituted at the AHL level, each of which have been delegated certain responsibilities for subsidiary oversight as set forth in their respective charters. The Company has established a Reinsurance and Operations Committee ("**AROC**") comprised of executive and senior management. AROC is responsible for reviewing and monitoring the Company's reinsurance transactions and addressing operational and other business matters impacting or potentially impacting the Company, subject to its level of delegated authority and mandate established by the Board. Although certain authorities are delegated to AROC, the Group governance structure provides mechanisms for each subsidiary's Board, including the Company's Board, to maintain ultimate oversight.

ii. Remuneration Policy

The Company's remuneration policy is intended to attract, recruit, develop and retain competent employees with the skills, knowledge and expertise to fulfill their allocated responsibilities, reward high performance and provide for staff to be compensated in a manner that encourages sound risk management in accordance with our core purpose and values. The Company's remuneration policy follows the AHL level remuneration policy.

*For additional information please refer to pages 29-38 of the AHL 2019 definitive proxy statement filed with the United States Securities and Exchange Commission (the "**AHL 2019 Proxy Statement**") which can be found at: https://ir.athene.com/Cache/397601644.pdf.*

iii. Pension or Early Retirement Schemes for Members, Board and Senior Employees

The Company provides all employees, including executive and senior management with pension benefits through a defined contribution pension scheme, administered by a third party. The Company provides matching contributions consistent with the employee's level of contribution up to a pre-determined amount. Funds are invested in investment portfolios as selected by the employee. The Company does not have an early retirement scheme nor provides pension benefits to its members or Directors.

iv. Any material transactions with shareholder controllers, persons who exercise significant influence, the Board or senior executives

The Company has a strategic relationship with Apollo Global Management, LLC ("**AGM**"). AGM's indirect subsidiary, Athene Asset Management, LLC ("**AAM**"), serves as the Company's investment manager. In addition to being our co-founder, AGM assists us in identifying and capitalizing on acquisition opportunities that have been critical to AHL's ability to significantly grow the business. Members of the AGM group are significant owners of AHL's common shares and control 45% of the aggregate voting power of AHL's equity securities, which may be subject to certain adjustments. James R. Belardi, the Chief Executive Officer of AHL and a member of the AHL Board and the Board, is the Chief Executive Officer, Chief Investment Officer and a director of AAM, and is an employee of AAM. He receives substantial remuneration from acting as Chief Executive Officer of AAM and also owns a 5% profits interest in AAM. Three other AHL directors, Messrs. Gernot Lohr, Matthew Michelini, and Marc Rowan, also serve as directors of AAM. Additionally, Gernot Lohr serves on the Board. The Company expects the strategic relationship with AGM to continue for the foreseeable future. AHL has entered into side letters with certain shareholders and have granted them certain rights pursuant to the respective side letters.

For additional information please refer to page 49 of the AHL 2019 Proxy Statement which can be found at https://ir.athene.com/Cache/397601644.pdf.

b. <u>Fitness and Propriety Requirements</u>

i. Fit and Proper process in assessing the Board and Senior Executive

The Company maintains a hiring and vetting process including recruitment and interviewing requirements, to confirm fitness and propriety for the relevant role. Board Governance Guidelines document and outline the Company's processes and procedures for assessing fitness and propriety of Board members, including individual qualifications and review of Board composition. Director qualifications, skills and experience and the interplay of those factors with the skills, qualifications and experience of incumbent directors are the type of factors that might be considered. Qualifications and credentials are documented by résumés and due diligence (including OFAC checks). Inquiries are made as deemed necessary.

Chief and Executive level officer appointments are reviewed and approved by the Board (or its parent in accordance with the Delegation of Authority Policy).

Other senior level management positions are approved by the Company's CEO and in some cases depending on seniority, the Board. Senior management qualifications and credentials are documented by résumés. Sufficiency of management resources are reviewed periodically by the Company's CEO and where appropriate the Board as part of long-term planning. Additional resources are retained as deemed necessary. The Company has also adopted the AHL Code of Business Conduct and Ethics, which all Directors and senior executives are expected to comply with as part of continuing fitness and propriety.

ii. Board and Senior Executives professional qualifications, skills and expertise

Board

Frank (Chip) Gillis – Director & Chief Executive Officer

Mr. Gillis has served as our Chief Executive Officer since June 2009 and is also a member of the Board.

Prior to founding the Company, Mr. Gillis was a Senior Managing Director of Bear Stearns & Company and was Head of the Bear Stearns' Insurance Solutions Group. In this position, he led BSC's entry into the funding agreement-backed note business and created the turn-key Premium Asset Trust Series program.

Prior to joining BSC, Mr. Gillis spent over three years at GenRe Financial Products providing ALM hedging solutions to U.S. life companies. Mr. Gillis serves on the boards of Bermuda International Long Term Insurers and Reinsurers Association and the Association of Bermuda International Companies.

Mr. Gillis received his Bachelor of Arts degree in English from the University of Richmond.

Gernot Lohr - Director

Mr. Lohr has served as a director of the Company since 2009. Mr. Lohr is a Senior Partner at AGM, which he joined in May 2007. Prior to joining AGM, Mr. Lohr was a founding partner at Infinity Point LLC, AGM's joint venture partner for the financial services industry since 2005. Before that time, Mr. Lohr spent eight years in financial services investment banking at Goldman, Sachs & Co. in New York and also worked at McKinsey & Company and B. Metzler Corporate Finance in Frankfurt.

Currently, Mr. Lohr serves on the board of directors of the general partner of AP Alternative Assets, AAA MIP Limited, Amissima Assicurazioni (formerly Carige Assicurazioni), Bremer Kreditbank Aktiengesellschaft, Catalina Holdings, Nova Kreditna Banka Maribor and Tranquilidade. Mr. Lohr has a joint Master's Degree in economics and engineering from the University of Karlsruhe, Germany, and received a Master of Business Administration from the MIT Sloan School of Management.

William (Bill) Wheeler - Director

Mr. Wheeler has served as a director of the Company since 2016. He is also President of our parent AHL. Prior to joining AHL, Mr. Wheeler was President of the Americas group for MetLife Inc. where he oversaw the insurance and retirement business in the United States and Latin America. During his seventeen-year tenure at MetLife, Mr. Wheeler assumed various executive positions, including

Executive Vice President and Chief Financial Officer. In addition, Mr. Wheeler served as Treasurer for MetLife, playing a key role in preparing MetLife to become a public company. Prior to joining MetLife, Mr. Wheeler was an investment banker at Donaldson, Lufkin & Jenrette.

Mr. Wheeler has a Bachelor of Arts degree in English from Wabash College and a Master of Business Administration from Harvard Business School. He currently serves on the board of Evercore Partners Inc.

Hope Taitz – Director

Mrs. Taitz has served as a director of our company since 2011. Mrs. Taitz is also a director of AHL, Athene USA, AAIA, ALICNY and AANY, and also serves on the audit committees for AHL and AANY. Since 2004, Mrs. Taitz has acted as a consultant focused on analyzing and investing in the consumer industry in both early and late stage. Mrs. Taitz currently serves on the board of MidCap Holdings. From 1995 to 2003, Ms. Taitz was Managing Partner of Catalyst Partners, L.P., a money management firm. From 1990 to 1992, Mrs. Taitz was a Vice President at The Argosy Group (now part of the Canadian Imperial Bank of Commerce (NYSE: CM)) specializing in financial restructuring before becoming a Managing Director at Crystal Asset Management, from 1992 to 1995. From 1986 to 1990, Ms. Taitz was at Drexel Burnham Lambert, first as a mergers and acquisitions analyst and then as an associate in the leveraged buyout group.

Mrs. Taitz is a founding executive member of Youth Renewal Fund, a current executive board member of Pencils of Promise and a member of the undergraduate executive board of The Wharton School at the University of Pennsylvania. Mrs. Taitz is a former board member of Girls Who Code and is now a board member of the New York City Foundation for Computer Science.

Mrs. Taitz graduated with honors from the University of Pennsylvania with a Bachelor of Arts degree in economics.

James Belardi - Director

Mr. Belardi has served as a director since 2009. In addition, Mr. Belardi is the Chairman, Chief Executive Officer and Chief Investment Officer of AAM, Athene's investment manager. Prior to founding Athene and AAM, Mr. Belardi was President of SunAmerica Life Insurance Company and was also Executive Vice President and Chief Investment Officer of AIG Retirement Services, Inc., where he had responsibility for an invested-asset portfolio of $250 billion.

Mr. Belardi has a Bachelor of Arts degree in economics from Stanford University and a Master of Business Administration from the University of California, Los Angeles.

He currently serves on the board of directors of Paulist Productions, where he chairs the investment committee, Aris Mortgage Holding Company LLC and Southern California Aquatics. Mr. Belardi was selected to serve on our board of directors as a result of his demonstrated track record and extensive experience in the insurance industry.

Robert Borden - Director

Mr. Borden has served as a director of our company since 2010. Mr. Borden is Managing Partner and Chief Investment Officer of Delegate Advisors, LLC. From April 2006 to January 2012, Mr. Borden served as the Chief Executive Officer and Chief Investment Officer of the South Carolina Retirement System Investment Commission, which is responsible for investing and managing all assets of the South Carolina Retirement Systems. Prior to his role at SCRSIC, Mr. Borden served as the Executive Director and Chief Investment Officer of the Louisiana State Employees Retirement System, where he was responsible for investment management, benefits administration, finance and operations. Mr. Borden has also served as Vice Chairman and Chairman of the Fund Evaluation Committee for the Louisiana Deferred Compensation Commission and as a member of the South Carolina Deferred Compensation Committee. Prior to that, Mr. Borden served as Treasurer and Senior Manager for Financial Services at the Texas Workers' Compensation Insurance Fund after serving as VP of Treasury and Interest Rate Risk Manager at Franklin Federal Bancorp.

Mr. Borden serves on the board of directors of Delegate Advisors, LLC, AGM Senior Floating Rate Fund, Inc. and AGM Tactical Income Fund Inc. Mr. Borden has a Bachelor of Business Administration with a major in finance from the University of Texas at Austin and received a Master of Science degree in finance from Louisiana State University. Mr. Borden holds both the Chartered Financial Analyst and Chartered Alternative Investment Analyst professional designations. Mr. Borden was selected to serve on our board of directors as a result of his experiences as Chief Executive Officer and Chief Investment Officer at several companies.

Senior Executives

Natasha Scotland Courcy – SVP General Counsel & Chief Compliance Officer

Mrs. Scotland Courcy has served as ALRe's General Counsel & Chief Compliance Officer since January 2019 and has over 15 years of experience as a corporate attorney with 11 of those being in the reinsurance industry.

Mrs. Scotland Courcy has been with the Company since 2012 and works with the Group's business units to manage their reinsurance transactions including acquisitions, strategic transactions, reinsurance arrangements and alternative structures. Mrs. Scotland Courcy also supervises ALRe's corporate policy program, governance policies and procedures, and provides reports to our Board periodically.

Prior to joining the Company, Mrs. Scotland Courcy held legal counsel positions at other international companies where, amongst other things, she managed complex internal reorganization projects, merger and acquisition deals, cat-bond transactions, and assisted in managing the legal operational requirements for global subsidiaries.

Adam Laing – Chief Financial Officer and Principal Representative

Mr. Laing has served as ALRe's Chief Financial Officer since July 2017, having previously held the role of Controller from 2015.

Prior to joining the Company Mr. Laing worked at Deloitte where he provided audit and consulting services to Fortune 500 and public companies in the financial services sector including in life and annuities, property and casualty, and mortgage origination and servicing. Mr. Laing experienced all aspects of accounting and operations including complex investments, (re)insurance operations, reserving, income taxes, corporate and reporting, Sarbanes-Oxley, multiple bases of accounting as well as regulatory reporting and solvency in the U.S., Bermuda, and Europe.

Mr. Laing received his Master of Science degree in Accounting as well as his Bachelor of Science degree in Economics and Accounting from Boston College.

Bradley Molitor – Chief Actuary

Mr. Molitor has served as ALRe's Chief Actuary since January 2019, having previously held several senior actuarial positions at the Company. Mr. Molitor most recently led ALRe's pricing team, with responsibility for underwriting both organic and inorganic opportunities. Prior to leading the pricing team, Mr. Molitor was responsible for ALRe's Actuarial Financial reporting team, as Athene made its public company debut.

Before joining the Group, Mr. Molitor served as a Financial Reporting and Risk Management Actuary for Transamerica in both the US and Bermuda. Mr. Molitor has extensive experience with actuarial reserving, financial reporting, capital management, pricing, risk underwriting, reinsurance structuring and modeling. Mr. Molitor received his Bachelor of Science degree in Actuarial Science from the Bradley University, is a Fellow of the Society of Actuaries, and a member of the American Academy of Actuaries.

Jon Steffen - Approved Actuary

Mr. Steffen has served as ALRe's Approved Actuary since January 2019, having previously held several senior actuarial positions at the Company. Mr. Steffen has most recently led ALRe's quarterly reporting under US GAAP, US Statutory, and Economic Balance Sheet ("**EBS**") frameworks. Prior to leading the quarterly financial reporting, Mr. Steffen oversaw production of Cash Flow Testing and other Risk reporting streams. Mr. Steffen also stood up Athene's EBS reporting and was a thought leader in Athene's interpretation of the emerging framework.

Before joining the Company, Mr. Steffen served as a Financial Reporting Actuary in Bermuda and a Risk Management actuary in the US. Mr. Steffen has extensive experience with financial reporting, risk management, and model development. Mr. Steffen received his Bachelor of Science degree in Economics from University of Illinois and is a Fellow of the Society of Actuaries, a member of the American Academy of Actuaries, and a Chartered Enterprise Risk Analyst.

Barry McDonald – Chief Risk Officer

Mr. McDonald joined the Company in March 2015 as the Chief Risk Officer. Mr. McDonald has extensive experience in the Bermuda insurance market, having spent over 25 years on the island as a financial professional in various roles. Most recently, Mr. McDonald was a consultant for Beecher & Carlson, evaluating and reviewing financial activity and accounting processes of U.S. and Lloyd's syndicate contracts.

Prior to this Mr. McDonald spent eight years at Catlin Insurance Group, where he became Group Head of Core Fixed Income and was charged with bringing in-house the fixed income management platform and managing a portfolio of $400 million. His former roles at Catlin included Group Treasurer, CFO of Catlin Insurance Company and CIO of Catlin Insurance Group.

Mr. McDonald received his Bachelor of Commerce from the University of Manitoba, Canada and is a CA and CFA.

Jay King – Internal Audit

Prior to joining the Group, Mr. King led Aviva's U.S. and Canadian audit function from 2011 until the acquisition of Aviva's U.S. business by our parent, AHL. Previously, Mr. King was head of Genworth's global internal audit function, a position he held since 2005. From 2001 to 2005, Mr. King worked in enterprise risk management and internal audit at Capital One Financial, and prior to that, with Spark Capital, a finance consulting firm helping technology companies with venture capital funding. He began his career at PricewaterhouseCoopers.

Mr. King received his Bachelor of Business Administration in Accounting from James Madison University, and a Master of Business Administration and Master of Science in Information Systems from the University of Maryland. He is a Certified Public Accountant and Certified Internal Auditor.

c. Risk Management and Solvency Self-Assessment

i. Risk Management processes and procedures to identify, measure, manage and report on Risk Exposures

The Group maintains an enterprise wide risk management ("**ERM**") framework. The function of the Group's ERM framework is to identify, assess and prioritize risks to ensure that both senior management and the Board understand and can manage our risk profile. The risk management team structure consists of an ERM team, a derivatives trading team and an asset risk team. The risk management team is led by AHL's Chief Risk Officer ("**CRO**"), who reports to the chair of the AHL Risk Committee. The Group's risk management team is comprised of approximately 30 dedicated, full time employees. One of these is the CRO of ALRe who is also the Vice President of Liquidity Risk for the Group.

Risk areas are reviewed at the entity specific exposure and then consolidated and evaluated at the consolidated level. Risk Self-Assessment ("**RSA**") reviews are completed at an entity level including ALRe covering all facets of the Company's business including but not limited to Capital Management, Actuarial, Tax, Finance, IT, Legal and Compliance and Human Resources. The RSA process addresses Risk Categories, Risk Descriptions, Current Risk Mitigation, Potential Enhancements to Risk Mitigation, Probability of Occurrence and Severity. Entity and overall results of the RSA process are discussed at the parental level Operational Risk Committee and then communicated to the AHL Management Risk Committee ("**MRC**") and the Board of the Company and/or the AHL Risk Committee or Board as required.

AHL prepares an Own Risk and Solvency Self-Assessment ("**ORSA**") with certain expansions addressing ALRe Commercial Insurer Solvency Self-Assessment ("**CISSA**") queries outlined in the Bermuda statutory return.

ii. Description of how the risk management and solvency self-assessment systems are implemented and integrated into the insurer's operations; including strategic planning and organizational and decision making process

The ALRe CRO provides a report to the Board which encompasses multiple risk areas including but not limited to stress testing results with a particular focus on the role of ALRe in the provision of collateral and/or capital under its reinsurance agreements and capital maintenance agreements. The ALRe CRO reports to the Board regarding the ability of ALRe and AHL to effectively manage liquidity risk, derivative activity performed for the economic benefit of ALRe including activity related to modco contracts and investment compliance reporting. The ALRe CRO is an active member of various ALRe Committees whose focus is on ALRe specific issues. These include AROC, several sub-committees and weekly/monthly meetings reviewing rate setting, product development and operational risk. The ALRe CRO is involved directly with the AHL VP, Assistant Treasurer regarding capital management and liquidity management including establishment of various inter-company lending facilities, monitoring of liquid assets both at ALRe and AHL addressing the quantification and allocation of capital to current and new operations.

iii. Description of the relationship between the solvency self-assessment, solvency needs, and capital and risk management systems

The Group seeks to manage its business, capital and liquidity profile with the objective of withstanding severe adverse shocks, while maintaining a meaningful buffer above regulatory minimums and certain capital thresholds.

The Company's solvency self-assessment tests that there is sufficient group capital (at the AHL level) available to withstand the various risks that affect the Company, individually and collectively, up to its risk appetite. Risk appetite is defined and communicated to the Company's businesses through a series of position, liquidity and scenario limits, as well as through its risk review processes. These limits are the operational expression of the Company's risk appetite, and taken together, define the capital required to execute its business plan and remain within its risk appetite.

The Company's risk appetite is defined by its performance in the following two stress scenarios:

1. **Moderate stress event**: Maintain targeted financial strength and ratings at its major regulated insurance subsidiaries; and
2. **Substantial stress event**: Retain investment grade financial strength and ratings at its major regulated insurance subsidiaries.

The impacts of these events on all AHL subsidiaries, including ALRe, are calculated and accumulated. As ALRe holds the majority of the Group's capital, the impact on its portfolios are evaluated and the impact under various reinsurance agreements is reflected in the stress testing results. The results are reported to both the Board and the AHL Board. The impact of such events both on capital and the anticipated impact on third party ratings (AM Best, S&P) are quantified. Similar evaluations are carried out under the EBS tests specific to ALRe and reported on the various sub-committees and the Board with a particular focus on the capital impact.

The Company evaluates exposure to market risk through internally defined modeling of portfolio performance during times of economic stress. The Company manages business, capital and liquidity needs to withstand stress scenarios and target capital that it believes will maintain current ratings in a moderate recession scenario and will allow the Company to continue to be rated investment grade under a substantially severe financial crisis akin to the Lehman scenario in 2008. In the recession scenario, the Company calibrates recessionary shocks to several key risk factors (including but not limited to, S&P 500, BBB corporate spreads, high yield corporate spreads and 2 year and 10 year U.S. Treasury yields) using data from the 1991, 2001 and 2008 recessions, and estimate mark to market impacts to the various sectors in the portfolio using regression analysis of their credit spreads to the key risk factors. To estimate other-than-temporary-impairment ("**OTTI**") impacts, the Company uses historical default, stressed recovery, and ratings migration rates from the aforementioned recessionary periods. In the Lehman scenario, the Company uses credit spread and interest rate movements between September 12, 2008 and December 15, 2008 to estimate mark to market changes and also uses one-year default probabilities from 2008, along with stressed recovery and ratings migration rates, to estimate OTTI impacts. The Company reviews the impacts of stress test analyses quarterly with management.

iv. Description of the solvency self-assessment approval process including the level of oversight and independent verification by the Board and senior executives

The ORSA which is completed prior to the filing of the Bermuda Solvency Capital Requirement ("**BSCR**") but not provided to the AHL Board for approval until a later date is the principal document utilized for solvency self-assessment. The ORSA draws heavily on: (i) strategy and planning work completed during the period; (ii) the year-end statutory valuation; (iii) MRC, (iv) the AHL Management Investment Committee; and (v) the AHL Asset Liability Committee reports. The process that underpins the ORSA is not merely a snap-shot, but a continual review throughout the year by multiple parties across all disciplines including Finance, Legal, Actuarial, Risk, Asset Management, Treasury and Internal Audit. The ORSA documents management information that has previously been reviewed and approved by senior management and the AHL Board and informs Company management of any issues or concerns not already communicated.

d. <u>Internal Controls</u>

i. Description of the internal control system

The combined management of AHL and each Bermuda based licensed entity, including the Company, are responsible for establishing a SOX complaint framework for the Group and the Company's internal controls over financial reporting including those policies and procedures that: (1) pertain to the maintenance of records that, in reasonable detail, accurately and fairly reflect the transactions and dispositions of the assets of the Company; (2) provide reasonable assurance that transactions are recorded as necessary to permit preparation of financial statements in accordance with GAAP, and that receipts and expenditures of the Company are being made only in accordance with authorizations of management and the Board; and (3) provide reasonable assurance regarding prevention or timely detection of unauthorized acquisition, use, or disposition of Company's assets that could have a material effect on the GAAP financial statements of the Company or AHL.

ii. Compliance Function

The compliance function oversees the Company's compliance activity and promotes and sustains a corporate culture of compliance and integrity.

Compliance develops policies, procedures and processes, maintains compliance monitoring and testing (including a plan to address any deficiencies or non-compliance that may be identified); oversees that there are processes in place for regulatory monitoring; and supports management in implementing any new rules, regulations or internal documentation, policies, procedures and controls in addition to maintaining mechanisms for staff to confidentially report concerns regarding compliance deficiencies and breaches.

The function also acts as a channel of communication to receive, review, evaluate and investigate compliance issues or direct such matters to the appropriate department for investigation and resolution.

e. Internal Audit

The Internal Audit department reports to the AHL Audit Committee and is staffed independently of any other function. Internal Audit's responsibilities are outlined in the AHL Internal Audit Charter as approved by the AHL Audit Committee. Internal Audit has no responsibility for other functions across the businesses. This reporting structure and responsibility promotes independence and better compliance. The Internal Audit function encompasses, but is not limited to, the examination and evaluation of the adequacy and effectiveness of the Group's governance, risk management, and internal controls, as well as quality of performance, in carrying out assigned responsibilities, to achieve the Group's stated goals and objectives. Internal Audit communicates all findings to organizational management and significant findings to the AHL Audit Committee. It has unrestricted access to the respective boards, committees, management and all areas of the organization.

f. Actuarial Function

The Company's Chief Actuary and Approved Actuary positions are responsible for monitoring information concerning the liabilities of the Company and have oversight responsibilities for the Company's underwriting processes and financial reporting including EBS and actuarial staff functions.

g. Outsourcing

i. Outsourcing Policy and key functions that have been outsourced

The Company maintains an outsourcing and procurement policy that outlines the vetting, suitability and contracting process for outsourced relationships and the due diligence procedures to be undertaken to monitor performance and provide oversight of such arrangements. The Company monitors its outsourcing partners and integrates their services into its operations. The Company believes that outsourcing certain functions allows it to focus capital and employees on core business operations. The Company has not outsourced the key functions of actuarial, risk management or compliance.

ii. Material Intra-group Outsourcing

The internal audit, certain modelling and investment accounting functions are performed at the AHL level for the Group, including the Company. The investment management function is managed by AAM, a subsidiary of AGM.

h. Any other material information

None.

6. RISK PROFILE

a. Material Risks the Insurer is exposed to during the Reporting Period

The 2018 RSA review and Operational Risk review process was completed encompassing a comprehensive review of all documented and undocumented processes and procedures as they relate to Fraud, Human Resources, Outsourcing Distribution Channels Business Processes, Business Continuity, Information Systems and Compliance. Material risks were identified and quantified as to economic impact and probability with the identification of mitigating controls and potential future mitigating controls. Documented processes are in place ensuring that material operational risks are identified and communicated to senior management and if warranted to various other Committees.

We have a risk management framework in place to identify, assess and prioritize risks, including the market and credit risks to which our investments are subject. As part of that framework, we test our investment portfolio based on various market scenarios. Under certain stressed market scenarios, unrealized losses on our investment portfolio could lead to material reductions in its carrying value. Under some extreme scenarios, total shareholders' equity could be negative for the period of time prior to any potential market recovery.

b. Risk Mitigation in the Organization

As part of the Company's 2018 RSA review potential future mitigating controls were identified. During 2019 these areas will be reviewed again and, where applicable additional mitigating controls will be put in place if appropriate.

Our risk management strategy is to proactively manage our exposure to risks associated with interest rate duration, credit risk and structural complexity of our invested assets. We address interest rate duration and liquidity risks by managing the duration of the liabilities we source with the assets we acquire through asset liability management modeling. We assess credit risk by modeling our liquidity and capital under a range of stress scenarios. We manage the risks related to the structural complexity of our invested assets through AAM's modeling efforts. The goal of our risk management discipline is to be able to continue to grow and achieve profitable results across various market environments.

c. Material Risk Concentration

Certain risks are identified and are tracked to ensure material risk concentrations are identified and communicated to the Company's senior management and the related Board as appropriate.

Market risk is the risk of incurring losses due to adverse changes in market rates and prices. Included in market risk are potential losses in value due to credit and counterparty risk, interest rate risk, currency risk, commodity price risk and equity price risk. We are primarily exposed to credit risk, interest rate risk and equity price risk.

d. Investment in assets in accordance with the Prudent Person Principles of the Code of Conduct

Most of the Company's investment assets are managed directly by AAM, a subsidiary of AGM. The remaining assets are managed by AAM in conjunction with a sub-advisory agreement between AAM and affiliates of AGM. Investment guidelines are reviewed on a regular basis and the Company's CRO is a member of the risk group that meets frequently with AAM to discuss current developments within the various entity's portfolios. The Company's CRO reviews all investment compliance reports and reports on the results to the Board.

e. <u>Stress testing and sensitivity analysis to assess Material Risks</u>

The Company assesses interest rate exposures for financial assets, liabilities and derivatives using hypothetical stress tests and exposure analyses. Assuming all other factors are constant, if there was an immediate, parallel increase in interest rates of 25 basis points from levels as of December 31, 2018, the estimated point-in-time impact to our pre-tax consolidated statements of income would have decreased since December 31, 2018. The increase compared to the prior year was driven primarily by growth of the assumed reinsurance embedded derivative. An immediate, parallel decline in interest rates of 25 basis points is estimated to decrease our pre-tax consolidated statements of income as of December 31, 2018 and 2017 by similar amounts to the increases discussed above.

Assuming a 25 basis points increase in interest rates persists for a 12-month period, the estimated impact to adjusted operating income would have increased. This is driven by an increase in investment income from floating rate assets, offset by DAC, DSI and VOBA amortization and rider reserve change, all calculated without regard to future changes to assumptions. The increase to adjusted operating income would be lower to the extent that we experience an increase in our effective tax rate. The models used to estimate the impact of a 25 basis point change in market interest rates incorporate numerous assumptions, require significant estimates and assume an immediate change in interest rates without any discretionary management action to counteract such a change. Consequently, potential changes in our valuations indicated by these simulations will likely be different from the actual changes experienced under any given interest rate scenarios and these differences may be material. Due to us actively managing our assets and liabilities, the net exposure to interest rates can vary over time. However, any such decreases in the fair value of fixed maturity securities, unless related to credit concerns of the issuer requiring recognition of an OTTI, would generally be realized only if we were required to sell such securities at losses to meet liquidity needs.

7. SOLVENCY VALUATION

a. <u>Valuation bases, assumptions and methods to derive the value of each asset class</u>

The Company has considered the valuation principles outlined by the BMA's "Guidance Note for Statutory Reporting Regime" for the reporting period's statutory filing. The Company's economic valuation principles are to measure assets on a fair value basis. Fair value is the price we would receive to sell an asset or pay to transfer a liability (exit price) in an orderly transaction between market participants. We determine fair value based on the following fair value hierarchy:

Level 1 - Unadjusted quoted prices for identical assets or liabilities in an active market.

Level 2 - Quoted prices for inactive markets or valuation techniques that require observable direct or indirect inputs for substantially the full term of the asset or liability. Level 2 inputs include the following:

- Quoted prices for similar assets or liabilities in active markets;
- Observable inputs other than quoted market prices; and
- Observable inputs derived principally from market data through correlation or other means.

Level 3 - Prices or valuation techniques with unobservable inputs significant to the overall fair value estimate. These valuations use critical assumptions not readily available to market participants. Level 3 valuations are based on market standard valuation methodologies, including discounted cash flows, matrix pricing or other similar techniques.

NAV - Investment funds are typically measured using NAV as a practical expedient in determining fair value and are not classified in the fair value hierarchy. The underlying investments of the investment funds may have significant unobservable inputs, which may include but are not limited to, comparable multiples and weighted average cost of capital rates applied in valuation models or a discounted cash flow model.

The fair value hierarchy gives the highest priority to quoted prices in active markets for identical assets or liabilities (Level 1) and the lowest priority to unobservable inputs (Level 3). If the inputs used to measure fair value fall within different levels of the hierarchy, the category level is based on the lowest priority level input that is significant to the instrument's fair value measurement.

We use a number of valuation sources to determine fair values. Valuation sources can include quoted market prices; third-party commercial pricing services; third-party brokers; industry-standard, vendor modeling software that uses market observable inputs; and other internal modeling techniques based on projected cash flows. We periodically review the assumptions and inputs of third-party commercial pricing services through internal valuation price variance reviews, comparisons to internal pricing models, back testing to recent trades, or monitoring trading volumes.

Fair Value Valuation Methods

We used the following valuation methods and assumptions to estimate fair value:

AFS and trading securities – We obtain the fair value for most marketable securities without an active market from several commercial pricing services. These are classified as Level 2 assets. The pricing services incorporate a variety of market observable information in their valuation techniques, including benchmark yields, trading activity, credit quality, issuer spreads, bids, offers and other reference data. This category typically includes U.S. and non-U.S. corporate bonds, U.S. agency and government guaranteed securities, CLO, ABS, CMBS and RMBS.

We also have fixed maturity securities with prices based on indicative broker quotes or by employing market accepted valuation models. For certain fixed maturity securities, the valuation model uses significant unobservable inputs and are included in Level 3 in our fair value hierarchy. Significant unobservable inputs used include: issue specific credit adjustments, material non-public financial information, estimation of future earnings and cash flows, default rate assumptions, liquidity assumptions and indicative quotes from market makers. These inputs are usually considered unobservable, as not all market participants have access to this data.

We value privately placed fixed maturity securities based on the credit quality and duration of comparable marketable securities which may be securities of another issuer with similar characteristics. In some instances, we use a matrix-based pricing model. These models consider the current level of risk-free interest rates, corporate spreads, credit quality of the issuer and cash flow characteristics of the security. We also consider additional factors such as net worth of the borrower, value of collateral, capital structure of the borrower, presence of guarantees and our evaluation of the borrower's ability to compete in its relevant market. Privately placed fixed maturity securities are classified as Level 2 or 3.

Equity securities – Fair values of publicly traded equity securities are based on quoted market prices and classified as Level 1. Other equity securities, typically private equities or equity securities not traded on an exchange are valued based on other sources, such as commercial pricing services or brokers and are classified as Level 2 or 3.

Mortgage loans – We estimate fair value on a monthly basis using discounted cash flow analysis and rates being offered for similar loans to borrowers with similar credit ratings. Loans with similar characteristics are aggregated for purposes of the calculations. The discounted cash flow model uses unobservable inputs including estimates of discount rates and loan prepayments. Mortgage loans are classified as Level 3.

Investment funds – Certain investment funds are priced based on market accepted valuation models. The valuation models use significant unobservable inputs, which include material non-public financial information, estimation of future distributable earnings and demographic assumptions. These inputs are usually considered unobservable, as not all market participants have access to this data.

Funds withheld (embedded derivative) - We estimate the fair value of the embedded derivative based on the change in the fair value of the assets supporting the funds withheld payable under the combined coinsurance, modco and coinsurance funds withheld reinsurance agreements. As a result, the fair value of the embedded derivative is classified as Level 2 or 3 based on the valuation methods used for the assets held in trust supporting the reinsurance agreements.

Derivatives – Derivative contracts can be exchange traded or over-the-counter. Exchange-traded derivatives typically fall within Level 1 of the fair value hierarchy depending on trading activity. Over-the-counter derivatives are valued using valuation models or an income approach using third-party broker valuations. Valuation models require a variety of inputs, including contractual terms, market prices, yield curves, credit curves, measures of volatility, prepayment rates and correlation of the inputs. We consider and incorporate counterparty credit risk in the valuation process through counterparty credit rating requirements and monitoring of overall exposure. We also evaluate and include our own nonperformance risk in valuing derivatives. The majority of our derivatives trade in liquid markets, therefore, we can verify model inputs and model selection does not involve significant management judgment. These are typically classified within Level 2 of the fair value hierarchy.

Cash and cash equivalents, including restricted cash – The carrying amount for cash equals fair value. We estimate the fair value for cash equivalents based on quoted market prices. These assets are classified as Level 1.

b. Valuation bases, assumptions and methods to derive the value of technical provisions

The Company has considered valuation principles outlined by the BMA's "Guidance Note for Statutory Reporting Regime" when determining insurance technical provisions. The Company believes that the techniques it uses in developing the insurance technical provisions are consistent with BMA guidance.

The primary valuation method that was used to determine the best estimate technical provisions was the BMA's Scenario Based Approach. The best estimate cash flows have been discounted reflecting the projected performance of the Company's assets under the most severe interest rate stress scenario. The risk free interest rate scenarios were supplied by the BMA.

In addition, the Company also holds a risk margin to reflect the uncertainty inherent in the underlying cash flows which is calculated using the cost of capital approach and a risk-free discount rate term structure. The discount rate term structures are prescribed by the BMA for each reporting period.

The technical provisions for non-participating long duration contracts are established using accepted actuarial valuation methods which require us to make certain assumptions regarding expenses, mortality, and morbidity persistency at the date of issue or acquisition.

For the fixed indexed annuity business with guaranteed life withdrawal benefit and guaranteed minimum withdrawal benefit riders, the methods we use to estimate the liabilities have assumptions about policyholder behavior, which includes lapses, withdrawals and utilization of the benefit riders, mortality and market conditions affecting the account balance growth.

Projected policyholder lapse and withdrawal behavior assumptions are set in one of two ways. For certain blocks of business, this behavior is a function of our predictive analytics model which considers various observable inputs. For the remaining blocks of business, these assumptions are set at the product level by grouping individual policies sharing similar features and guarantees and reviewed periodically against experience. Base lapse rates consider the level of surrender charges and are dynamically adjusted based on the level of current interest rates relative to the guaranteed rates and the amount by which any rider guarantees are in a net positive position. Rider utilization assumptions consider the number and timing of policyholders electing the riders. We track and update this assumption as experience emerges. Mortality assumptions are set at the product level and generally based on standard industry tables, adjusted for historical experience and a provision for mortality improvement.

c. Description of recoverables from reinsurance contracts

The following summarizes our reinsurance recoverables from the following:

(In millions)	December 31, 2018	2017
Global Atlantic	$ 3,166	$ 3,482
Protective	1,652	1,699
ARE	337	—
Other[1]	379	139
Reinsurance recoverable	$ 5,534	$ 5,320

[1]*Represents all other reinsurers, with no single reinsurer having a carrying value in excess of 5% of total recoverable.*

For additional information on recoverables from reinsurance contracts please refer to Note 6 at page 46 of the Company's GAAP financial statements - "Reinsurance" for the reporting period, available on our website at: http://www.athenelifere.bm/about/financials/.

d. <u>Valuation bases, assumptions and methods to derive the value of other liabilities</u>

Similar to the valuation principles for assets, the Company's liabilities follow the valuation principles outlined by the BMA's "Guidance Note for Statutory Reporting Regime" which values liabilities on a fair value basis.

For additional information on the fair value principles used to value liabilities for "other than technical provisions", please refer to Note 1 at page 11 - "Business, Basis of Presentation and Significant Accounting Policies" and Note 5 at page 34 - "Fair Value" in the Notes to the Company's GAAP financial statements available on our website at: http://www.athenelifere.bm/about/financials/.

8. CAPITAL MANAGEMENT

a. <u>Eligible Capital</u>

i. Capital Management Policy and process for capital needs, how capital is managed and material changes during the Reporting Period

The Company assesses its capital adequacy and needs in relation to its risk profile, which is assessed against the regulatory level on a periodic basis. The primary capital objectives of capital are:

- To safeguard its ability to continue as a going concern, so that it can continue to pay policyholder claims as they arise and to provide long-term growth;
- To provide an adequate return to the Group's shareholders by pricing insurance products an services commensurately with the level of risk;
- To maintain an efficient cost of capital;
- To comply with all regulatory requirements; and
- To maintain financial strength as assessed by rating agencies.

Our capital adequacy assessment tests whether there is sufficient Group capital available to withstand the various risks that affect the Company, individually and collectively, up to its risk appetite. Risk appetite is defined and communicated to the Company's businesses through a series of position, liquidity, and scenario limits, as well through its risk review process. The Company's risk appetite under ordinary course of events is to have each of its major regulated insurance subsidiaries maintain financial strength ratings from A.M. Best and from at least one other NRSRO. Because rating agency models can be opaque to external users, the Company translates its ratings targets into regulatory capital requirements. The Company considers its capital target linked to the rating target at its operating entities, if the capital target is met, the Company is effectively meeting its rating target.

The Company operates in different regulatory jurisdictions and assess capital management results under the NAIC Risk Based Capital framework and the BSCR frameworks, as applicable.

There have been no material changes in the capital management policy and process in 2018.

ii. Eligible Capital categorized by tiers in accordance with the Eligible Capital Rule

To enable the BMA to better assess the quality of the insurer's capital resources, a Class E insurer is required to disclose the makeup of its capital in accordance with the '3-tiered capital system'. Highest quality capital is classified as Tier 1 Capital, lesser quality capital is classified as either Tier 2 or Tier 3 Capital. The Act requires that Class E insurers have Tier 1 Capital equal to or greater than 50% of the value of its enhanced capital requirement ("**ECR**") and Tier 3 Capital of not more than 17.65% of the aggregate of its Tier 1 Capital and Tier 2 Capital.

As of December 31, 2018, all of the eligible capital used by ALRe to meet the minimum margin of solvency ("**MMS**") and ECR was Tier 1 Capital. ALRe monitors its capital tiers and any encumbrances on capital when determining capital tiers, including assessing any capital restricted in trusts and funds withheld or modco arrangements.

iii. Eligible Capital categorized by tiers in accordance with the Eligible Capital Rules used to meet ECR and MMS requirements of the Act

As of December 31, 2018, all of the eligible capital used by ALRe to meet the MMS and ECR was Tier 1 Capital.

iv. Confirmation of Eligible Capital that is subject to transitional arrangements

Not applicable.

v. Identification of any factors affecting encumbrances on the availability and transferability of capital to meet the ECR

Not applicable.

vi. Identification of ancillary capital instruments approved by the Authority

Not applicable.

vii. Identification of differences in shareholder's equity as stated in the Financial Statements versus the available capital and surplus

Please see the table in section 8b(i) below - *ECR and MMS requirements at the end of the Reporting Period.*

b. <u>Regulatory Capital Requirements</u>

i. ECR and MMS requirements at the end of the Reporting Period

	Year ended December 31, 2018		
(In millions)	GAAP	SFS	EBS
Actual Capital and Surplus	$9,107	$9,658	$12,008
Required Capital and Surplus (1)	N/A	$883	$3,532
BSCR Ratio (2)	N/A	N/A	340%

(1) Represents the MMS for the SFS and the ECR for EBS. There is not a required capital and surplus amount for the GAAP financial statements.

ii. Identification of any non-compliance with the MMS and the ECR

The Company was compliant with the MMS and ECR requirements at the end of the reporting period.

iii. A description of the amount and circumstances surrounding the non-compliance, the remedial measures and their effectiveness

Not applicable.

iv. Where the non-compliance is not resolved, a description of the amount of the non-compliance

Not applicable.

c. <u>Approved Internal Capital Model</u>

Not applicable.

9. SUBSEQUENT EVENTS

Not applicable.