ARBELLA RESPONSES TO 2022 CLIMATE RISK SURVEY

Q1: 1. Disclose the insurer's governance around climate-related risks and opportunities. In disclosing the insurer's governance around climate-related risks and opportunities, insurers should consider including the following:

- Describe where climate-related disclosure is handled within the insurer's structure, e.g., at a
 group level, entity level, or a combination. If handled at the group level, describe what activities
 are undertaken at the company level.
- Identify and include any publicly stated goals on climate-related risks and opportunities.

A. Describe the board and/or committee responsible for the oversight of climate-related risks and opportunities. In describing the position on the board and/or committee responsible for the oversight of managing the climate-related financial risks, insurers should consider including the following:

- Describe the position on the board and/or committee responsible for the oversight of managing the climate-related financial risks.
- B. Describe management's role in assessing and managing climate-related risks and opportunities

The Audit Committee of Arbella Mutual and Arbella, Inc. is charged with oversight of the enterprise risk management process for the Arbella Insurance Group. Annually, management meets with the Audit Committee to review key risks facing Arbella. Appropriate measurements and tolerances for each risk are identified. The Audit Committee then reviews and recommends a schedule of risks, measurements and tolerances to the full Arbella board for review and adoption. The Risk Committee, a committee made up of the CEO, the CFO (who serves as Arbella's Chief Risk Officer ("CRO")) and the executives overseeing each operational department at Arbella, monitors and manages these risks throughout the year and meets regularly (but no less than quarterly) to discuss Arbella's performance against the approved tolerances. The CRO reports on these risks at each quarterly Audit Committee meeting. In addition, the ERM dashboard is shared with the full Board at each quarterly Board meeting. Arbella considers climate related risks as part of Arbella's review of risks related to Catastrophe, Reinsurance, Reserving and Pricing & Risk Selection. In May 2023, the Arbella Board of Directors amended the Audit Committee's charter to ensure that the Committee's annual review of enterprise risk included a consideration of climate change and the relative materiality of any risk presented by climate change See Arbella's response to Question 3 below for further details.

Q2. Disclose the actual and potential impacts of climate-related risks and opportunities on the insurer's businesses, strategy, and financial planning where such information is material. In disclosing the actual and potential impacts of climate-related risks and opportunities on the insurer's businesses, strategy and financial planning, insurers should consider including the following:

- Describe the steps the insurer has taken to engage key constituencies on the topic of climate risk and resiliency.
- Describe the insurer's plan to assess, reduce, or mitigate its greenhouse gas emissions in its operations or organizations.
 - A. Describe the climate-related risks and opportunities the insurer has identified over the short, medium, and long term. In describing the climate-related risks and opportunities the insurer has identified over the short, medium, and longer term, insurers should consider including the following:
 - Define short, medium, and long-term, if different than 1-5years as short term, 5-10 years as medium term, and 10-30years as long term.
 - B. Describe the impact of climate-related risks and opportunities on the insurer's business, strategy, and financial planning. In describing the impact of climate-related risks and opportunities on the insurer's business, strategy, and financial planning, insurers should consider including the following:
 - Discuss if and how the insurer provides products or services to support the transition to a low carbon economy or helps customers adapt to climate-related risk.
 - Discuss if and how the insurer makes investments to support the transition to a low carbon economy.
 - C. Describe the resilience of the insurer's strategy, taking into consideration different climaterelated scenarios, including a 2 degree Celsius or lower scenario.

The biggest identified risk to Arbella's business from climate change is the potential for significant losses in our property insurance lines of business from an increase in the frequency and severity of adverse weather including tropical storms/hurricanes, winter storms and convective storms in the New England region. Arbella has determined that these risks are short, medium and long-term risks and expects that the frequency and severity of these weather types to increase over time.

Arbella engages annually with certain of its reinsurance partners that are viewed as leading research institutions on the topic of climate change to understand their view of the myriad of related risks to the property and casualty industry from climate change. The CRO meets annually with a well-respected research meteorologist to discuss all aspect of climate change and the risks posed to a Northeast property and casualty insurer.

We have several communications with our independent agents and policyholders about disaster safety and planning and potential loss prevention or mitigation opportunities, the increase in severe weather and its impact on our business. We have discussed the strategies the company is employing to mitigate risk and lessen the impact of climate change to our financial condition.

Arbella is a member of NAMIC who is an advocate for stronger, safer buildings for Americans. NAMIC supports the BuildStrong Coalition, which believes that safer building codes can save lives and reduce loss, especially from severe weather events. NAMIC supports state and federal legislation to encourage the adoption and enforcement of strong building codes. NAMIC and the BuildStrong Coalition support the creation of a separate, federal financial incentive for states that adopt and enforce statewide building codes.

Arbella has seats on the Massachusetts Property Insurance Underwriting Association (MPIUA) Board and its Underwriting Committee and Investment Committee where it monitors key initiatives impacting the MPIUA and the marketplace. Participation additionally allows Arbella to partner with the MPIUA on mitigation and regulatory initiatives.

Arbella's CEO, John Donohue, is a member of Boston Massachusetts' Green Ribbon Commission, a group of Boston's top executives and community leaders tasked with providing advice and counsel to the City of Boston on the design and implementation of its Climate Action Plan. Arbella is an active participant in working with the Green Ribbon Commission as it works with the City of Boston, an area where many of Arbella's policyholders live and work, to build resiliency in the city and prepare for climate change. Arbella sits on the Green Ribbon Commission's Coastal Resilience Working Group, a group focused on addressing future threats from sea level rise, storm surge, and other climate change impacts on Boston's waterfront.

Arbella has active and ongoing efforts that improve energy efficiencies that contribute to ecological benefits. From 2015 – 2022 our home office location earned the energy star certification, with the exception of 2020 when the audit was not completed due to the pandemic. In 2022, we received an Energy Star rating of 94 because of the improvements to our LED lighting throughout our home office. We continue to aggressively manage our facilities with a focus on energy efficiency. Arbella designs its workspace and creates office standards to maximize the effective use of space. We consider the building infrastructure and mechanical systems to maximize the effectiveness of building heating and cooling systems. Updated systems such as gas heating boiler units with energy efficient boilers, replacement of all interior and exterior lighting fixtures in our main building location and installation of an Energy Management System (EMS) allow us to optimize our efficiency in heating, air conditioning and lighting. We manage our heating and cooling systems to reduce or shut down during low demand periods, and our office, conference room and parking lot lighting is equipped with timers and motion detection systems to improve energy conservation. All of these efforts have significantly reduced our electricity and gas consumption. Our water conservation efforts include hands-free faucets and landscaping that reduces irrigation requirements. In addition, we continue an active recycling program.

In addition, we have ongoing technology initiatives that also improve our energy efficiency. We completed a data center migration and modernization program in 2022 that moved the data center in Arbella's home office to a data center facility run by the Markley Group. This effort reduced our server footprint through virtualization and replacement with modern servers that operate with higher levels of efficiency. This is on top of cooling, power management, and carbon management capabilities provided by our data center partner. Over the next year, we will reduce the number of power distribution units, cooling units, humidity controls, and other obsolete data center equipment to further drive down power consumption at our home office. Our server technology and personal computing technology are on regular re-fresh programs, ensuring that we take advantage of the latest, low consumption technology.

Arbella deploys and utilizes multi-function office machines, reducing power consumption through the elimination of multiple, disparate office machines (Fax, Copy, Print, Scan) and print output. Finally, recycling is an important part of our technology strategies.

All non-leased equipment is re-cycled through local e-waste recycling services subject to zero landfill policy and all leased equipment is returned to leasing company for re-use/re-sale. Arbella will work with these e-waste recycling services to dispose of equipment retired as part of the data center modernization program.

Arbella continues to transition paper output to electronic output. Our current electronic capabilities include a paper-less claim administration system, electronic agent copies of documents, electronic lien holder notifications, digitized personal lines policy files, electronic communications with our agents and information/reference information provided on our consumer website and agency portal. Our agency tools include electronic applications for most lines of business. Additionally, Arbella has a customer self-service portal (MyArbella), which provides customers the option of electronic billing and paper bill suppression. In addition, we have a team dedicated to identifying and implementing additional ways to reduce paper output. All of these initiatives reduce unnecessary paper, printing and postage.

While Arbella has not considered the 2 degree Celsius benchmark specifically, it does anticipate increasingly volatile weather conditions, including tropical storms/hurricanes, winter storms and convective storms in the New England region and has built a reinsurance program and modeling protocols to assess and mitigate what it anticipates will be an increasing risk. See Arbella's more detailed response to question 3 below.

- 3. Disclose how the insurer identifies, assesses, and manages climate-related risks. In disclosing how the insurer identifies, assesses, and manages climate-related risks, insurers should consider including the following:
- Describe how the insurer considers the impact of climate related risks on its underwriting portfolio, and how the company is managing its underwriting exposure with respect to physical, transition and liability risk.
- Describe any steps the insurer has taken to encourage policyholders to manage their potential physical and transition climate related risks, if applicable.
- Describe how the insurer has considered the impact of climate-related risks on its investment portfolio, including what investment classes have been considered.
- A. Describe the insurers' processes for identifying and assessing climate-related risks/ In describing the insurers' processes for identifying and assessing climate-related risks, insurers should consider including the following:
 - Discuss whether the process includes an assessment of financial implications and how frequently the process is completed.
- B. Describe the insurer's processes for managing climate-related risks.

C. Describe how processes for identifying, assessing, and managing climate-related risks are integrated into the insurer's overall risk management. In describing how processes for identifying, assessing, and managing climate-related risks are integrated into the insurer's overall risk management, insurers should consider including the following:

- Discuss whether climate-related risks are addressed through the insurer's general enterpriserisk management process or a separate process and how frequently the process is completed.
- Discuss the climate scenarios utilized by the insurer to analyze its underwriting risks, including which risk factors the scenarios consider, what types of scenarios are used, and what timeframes are considered.
- Discuss the climate scenarios utilized by the insurer to analyze risks on its investments, including which risk factors are utilized, what types of scenarios are used, and what timeframes are considered.

The biggest risk to Arbella's business from climate change is the potential for significant losses in our property insurance lines of business from an increase in the frequency and severity of adverse weather including tropical storms/hurricanes, winter storms and convective storms in the New England region. To manage catastrophe exposure, underwriters use mapping software to verify the location of individual exposures. Arbella monitors coastal exposure growth on a quarterly basis and has identified restricted coastal zones with targeted exposure levels and specific underwriting criteria/guidelines. In addition, various windstorm and other deductibles are in place depending on location/distance from the coast to further mitigate exposure to severe weather. Arbella has refined its definition of coastal exposure in the state of Massachusetts. With this change, the company is declining more coastal new business and is implementing higher named storm deductibles on certain policies. Similarly, in Connecticut, the company is implementing higher hurricane deductibles on certain coastal policies.

To reduce these climate related risk, the company purchases a robust catastrophe reinsurance program with a well-diversified roster of financially strong reinsurance companies to reduce its net exposure to severe weather events to an acceptable level of capital. Over the past few years, management has increased the limits of its reinsurance program to provide coverage for return periods well in excess of the 1-in-100 year period to ensure capital adequacy for the highest severity possible outcomes. Our robust reinsurance program and growth in our capital was recognized by A.M. Best in October 2020 when they upgraded our rating from A- to A Stable.

We use catastrophe-modeling software to estimate potential losses from all major perils, including tropical storm/hurricane. We use multiple models and run them bi annually with updated exposures using both a long term and a medium term view of weather patterns as well as with and without storm surge. The company uses this distribution of estimated losses to perform various stress tests to evaluate the company's exposure to more severe losses than experienced using historical experience. We continuously assess the impact of various modeled scenarios in regards to capital adequacy and business continuity. Stress testing is done at various modeled probabilities to assess the amount of surplus at risk at various points across the probability curve.

Understanding our Potential Maximum Loss (PML) from these events is inherent in underwriting decisions, strategic planning and capital management. Management estimates the potential impact from an increase in adverse weather conditions.

Management also performs scenario analysis to estimate the potential impact of actual recent severe weather events outside its footprint as if those events occurred within the markets we serve, and has modeled actual historical New England events against our current portfolio. The models used by the company estimate most New England historic hurricane events to be less than a 1 in 100-year event, which is within the company's established tolerance for wind risk. There are three historic events that fall between at least one of the model's probability of 1:100 and 1:250 year events. The company has adequate capital to fund each model's estimated losses for all historic New England hurricane events.

In addition to its robust reinsurance program, Arbella has a contingent liquidity source should the need arise via its membership in the Federal Home Loan Bank of Boston. Management has set specific risk tolerances and limits surrounding its exposure to catastrophic weather to ensure it has adequate capital and liquidity to meet its obligations to policyholders and maintain appropriate levels of capital subsequent to such events.

Arbella offers discounts to homeowners policyholders who install approved loss mitigation systems and/or take advantage of weather-resistant construction materials. Earthquake and hurricane deductibles as well as named storm deductibles are used, as allowed, and various options are available. We also assist our customers after a loss to take certain measures to prevent further weather related losses.

Arbella offers a 5% discount to any Massachusetts homeowners customer who works with Mass Saves, a collaborative of local energy providers, to have a home energy assessment conducted. This discount encourages policyholders to take the steps necessary to make their homes more energy efficient. Recommendations from the Mass Save energy assessment frequently include adding additional insulation, weatherproofing doors, windows and attic entrances, updating appliances and installing LED lighting throughout the home. Mass Save also provides subsidies for many of the suggested energy saving improvements.

Arbella encourages our commercial property policyholders to manage their exposure to loss from weather related events through interaction with our loss control department. Arbella continues to invest in our loss control department and resources to help our insureds manage risk and mitigate loss that can result from wind, precipitation, flood, extreme temperatures and other environmental factors. Our loss control representatives consult on property recommendations such as roof maintenance, snow removal, drainage, and best practices to prevent wind damage. We have created loss control "tip sheets" that are available to our agents and customers with respect to hurricane preparedness, business contingency planning, and winter tips. In addition, we make recommendations related to emergency preparedness and contingency planning. Arbella offers other products such as Flood Coverage and Earth Movement to protect our insureds from catastrophic perils while offering adequate and fair deductibles to make the coverage affordable.

The primary philosophies behind our investment strategy are capital preservation and liquidity adequacy. We stress test these objectives against a myriad of risks including significant underwriting losses from catastrophic weather events.

Management has further stress tested our ability to pay claims subsequent to a severe weather event by assuming the event(s) coincide with adverse investment, capital and economic markets. The Company has also established strict investment diversification criteria to limit its concentration of risk in any individual security, bond sector, geography or industry.

As part of our annual strategic planning and ERM processes, all key risks impacting, or potentially impacting, the company are identified and assessed to determine their potential impact and to develop effective risk mitigation processes. In addition to tracking research and analysis of experts in weather and climate change, we analyze historical data and trends related to climate change. The CRO also meets annually with a well-respected research meteorologist to discuss all aspect of climate change and the risks posed to a Northeast property and casualty insurer.

Management constantly reviews the effectiveness of its disaster recovery plan to ensure that the Company could respond to the challenges other companies have experienced in the more recent storms that significantly impacted their ability to sustain operations. In addition, management has a catastrophe response plan that has been stressed tested to ensure that we can effectively provide the necessary services to our policyholders in the wake of a severe weather event, including an expeditious review of insured losses and payment of claims. These plans were put to the test in 2015 when Massachusetts experienced five winter storm catastrophes in a four week span bringing historic snowfall totals and record extended cold temperatures producing historic levels of claims from our policyholders. While we continue to assess the company's performance in all aspects, these historic events did not provide any notable disruption in the company's operations or impair its ability to meet policyholder obligations and needs. These plans were further stressed in March 2020 with the requirement to close our offices and transition 100% to a work from home environment in response to government mandated shutdowns related to COVID-19. Despite the challenges presented, the Company has continued to meet all its obligations to policyholders, employees, agents and other stakeholders with the majority of our workforce working from home through August 31, 2021.

- 4. Disclose the metrics and targets used to assess and manage relevant collateralized risks and opportunities where such information is material. In disclosing the metrics and targets used to assess and manage relevant collateralized risks and opportunities where such information is material, insurers should consider including the following:
- Discuss how the insurer uses catastrophe modeling to manage the climate related risks to your business. Please specify for which climate-related risks the insurer uses catastrophe models to assess, if any.
- A. Disclose the metrics used by the insurer to assess climate-related risks and opportunities in line with its strategy and risk management process.

In disclosing the metrics used by the insurer to assess climate-related risks and opportunities in line with its strategy and risk management process, insurers should consider including the following:

- In describing the metrics used by the insurer to assess and monitor climate risks, consider the amount of exposure to business lines, sectors, and geographies vulnerable to climate-related physical risks [answer in absolute amounts and percentages if possible], alignment with climate scenarios, [1 in 100 years probable maximum loss, Climate VaR, carbon intensity], and the amount of financed or underwritten carbon emissions)
- B. Disclose Scope 1, Scope 2, and if appropriate, Scope 3 greenhouse gas (GHG) emissions, and the related risks.
- C. Describe the targets used by the insurer to manage climate-related risks and opportunities and performance against targets.

Arbella does not currently have Scope 1 or Scope 2 scores, but we actively work to mitigate climate-related risks and avail ourselves of opportunities to reduce GHG. Please see answer to Question 2 above for further information.

As noted in Question 3 above, we use catastrophe modeling software to estimate potential losses from all major perils, including tropical storm/hurricane. We use multiple models and run them bi annually. The models are then stressed to account for more short-term trends in weather conditions as well as for the potential impact from storm surge in coastal areas. Management also performs scenario analysis to estimate the potential impact of actual recent severe weather events outside its footprint as if those events occurred within the markets we serve, and has modeled actual historical New England events against our current portfolio. Both models utilized by the company estimate most New England historic hurricane events to be less than a 1 in 100 year event, which is within the company's established tolerance for wind risk. There are three historic events that fall between at least one of the model's probability of 1:100 and 1:250 year events.