CLIMATE RISK DISCLOSURE

GRANGE MUTUAL HOLDING COMPANY
NAIC GROUP NUMBER 267

July 2023

CONTENTS

SCOPE

This Climate Risk Disclosure applies to the Grange Mutual Holding Company (Grange), including its insurance and non-insurance subsidiaries. The Grange corporate structure is described below.

The Grange Mutual Holding Company wholly owns Grange Holdings, Inc., an intermediate stock entity. Grange Holdings is a non-insurance entity, which wholly owns the following.

- The Grange America Corporation, an Ohio stock, non-insurance entity;
- The Northview Insurance Agency, Inc., an Ohio stock company;
- The Grange Insurance Company (GIC), an Ohio insurance company; and
- The Integrity Insurance Company (IIC), an Ohio insurance company.

GIC wholly-owns the following insurance entity subsidiaries, each of which is an Ohio insurance company.

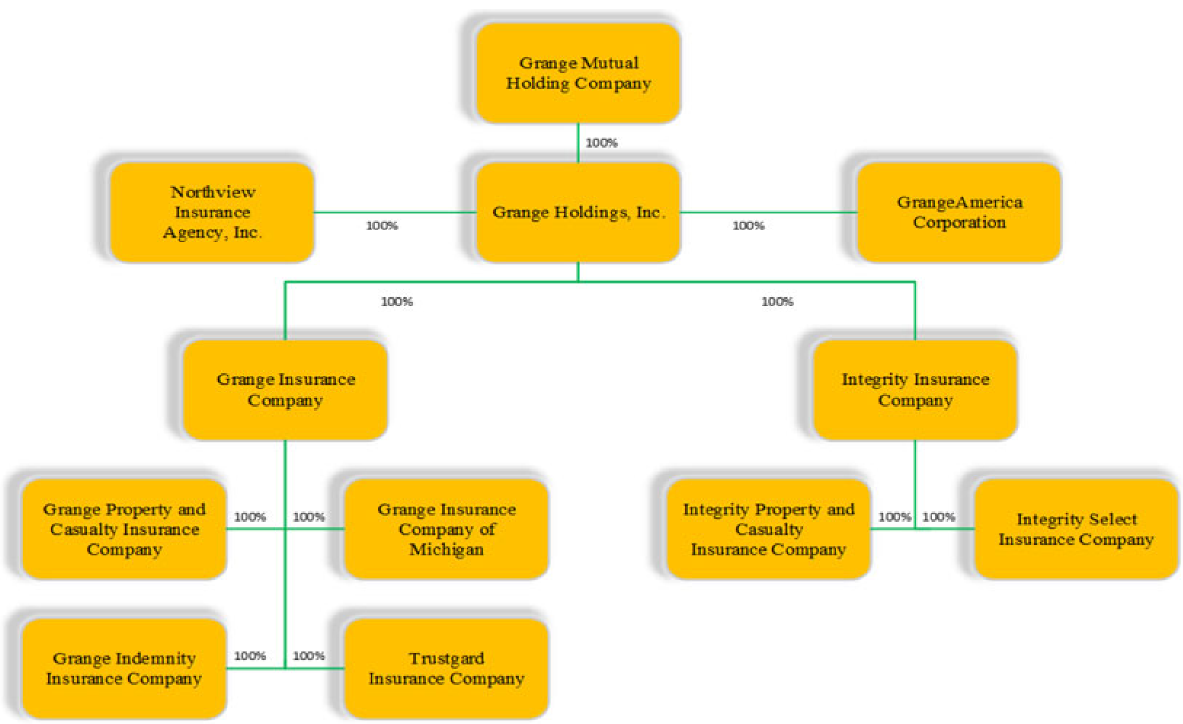
- The Grange Indemnity Insurance Company;
- The Grange Property & Casualty Insurance Company;
- The Grange Insurance Company of Michigan; and
- The Trustgard Insurance Company.

IIC wholly-owns the following insurance entity subsidiaries, each of which is an Ohio insurance company.

- The Integrity Property & Casualty Insurance Company; and
- The Integrity Select Insurance Company.

Figure 1 depicts the corporate structure of the group to which this disclosure applies.

FIGURE 1: GRANGE MUTUAL HOLDING COMPANY CORPORATE STRUCTURE



I. GOVERNANCE

Closed-Ended Questions

1. Does the insurer have publicly stated goals on climate-related risks and opportunities? **Yes**
2. Does your board have a member, members, a committee, or committees responsible for the oversight of managing climate-related financial risk? **Yes**
3. Does management have a role in assessing climate-related risks and opportunities? **Yes**
4. Does management have a role in managing climate-related risks and opportunities? **Yes**

RESPONDING TO QUESTION 1: Disclose the insurer's governance around climate-related risks and opportunities.

Grange has a consolidated Board of Directors (the Board) that governs the group at the parent company (*i.e.*, the Grange Mutual Holding Company) level. The Board's oversight and direction, including with respect to climate-related risks and opportunities, applies to all entities in the group.

Publicly Stated Goals
Grange's public web site (grangeinsurance.com) addresses climate-related risks and opportunities through its statement on Corporate Sustainability, excerpts of which are below.

> *Grange's commitment to corporate sustainability*
> Grange Insurance is committed to corporate sustainability as an ongoing promise to our customers, agency partners, associates, and community. Our environmental, social and governance (ESG) initiatives are integrated into our corporate strategy, mission and core values and set us up for continued success. We are committed to understanding and reducing our environmental risks and serving our customers responsibly.
>
> *Environmental*
> Since 2016, Grange has received environmental accolades with LEED (Leadership in Energy and Environmental Design) certifications from the U.S. Green Building Council for its headquarters in Columbus, OH. These certifications represent a continuous effort by Grange to adhere to several environmentally rigorous standards. Grange also offers remote and hybrid work options for associates, which reduces our contributions to carbon emissions from commutes to work.
>
> *LEED Gold Certification*
> Grange is LEED Gold certified for implementing practical and measurable strategies and solutions in sustainable site development, water savings, energy efficiency, material selection and indoor environmental quality. This allows Grange to operate more sustainably and gives associates inside a healthier, more comfortable space to work.
>
> *Paperless*
> We encourage our insurance customers to select paperless billing and leverage our website for access to electronic documents. Offering paperless options protects the environment, enhances the customer experience, and reduces our use of ink and electricity.

Climate strategies
Over the last several years, we've established strategies to address the changing climate. We're analyzing our approaches to underwriting and liability risks to determine impacts of climate hazards. We have robust portfolio risk management practices informed by industry leading catastrophe models, which ensure that we have the financial capacity to fulfill our promise to our customers even in extreme catastrophes.

Governance
Grange's board and leadership are committed to the highest standards of professionalism, practices, and performance. Our corporate governance ensures that we are operating ethically and with integrity. It also ensures we're creating sustainable value for our customers and agency partners.

Board of Directors
Our Board of Directors works with Grange's senior leadership to approve the short-term and long-term strategic plan. Board members regularly review progress we've made toward our strategic goals. This includes Environmental, Social and Governance (ESG) risks and opportunities that could impact our corporate sustainability. Our leadership is committed to ensuring the strategy is consistent with Grange's core values, culture, and risk appetite.

Associate Guide Code of Ethics & Business Conduct

The Corporate Sustainability statement on Grange's public web site is consistent with Grange's Associate Guide and Code of Ethics & Business Conduct Guidelines, which are provided to all associates, and which all associates are required to follow. Specifically, the Grange Code of Ethics & Business Conduct provides the following regarding Corporate Sustainability as it relates to climate related risk.

> *The Enterprise is committed to corporate sustainability as an ongoing promise to our customers, agency partners, associates, and community. Our environmental, social and governance (ESG) initiatives are integrated into our corporate strategy, mission and core values and set us up for continued success. We are committed to understanding and reducing our environmental risks and serving our customers responsibly.*

Director Qualifications and Competencies

The Board currently consists of ten qualified, experienced, credentialed, and diverse directors, eight of whom are independent and elected by members of the Grange Mutual Holding Company (*i.e.*, the policyholders of the subsidiary insurance companies). Grange adheres to Ohio corporate governance law, regulator-approved corporate code of regulations and bylaws, and self-adopted governance guidelines. Pursuant to Ohio law governing corporations, the Board acts in the best interest of the mutual holding company and its members.

Each director on the Board completes a competency assessment every other year. The assessment includes self-ratings of various governance oversight skills, which the Secretary of the Board collates into a combined report for the Board's Corporate Governance Committee to review. The Corporate Governance Committee uses the aggregate results to evaluate Board qualifications and to identify potential skill gaps. These findings are considered when the Board evaluates candidates to fill vacant seats. Experience in the oversight and management of corporate ESG implementation, reporting, and initiatives is one of many skills deemed desirable of new directors.

Board and Senior Management Educational Sessions

The Board and Grange senior management regularly leverage the expertise of outside professional consultants on a range of topics, including ESG topics that address weather and climate risk. In 2021, the Board's Corporate Governance Committee agenda included an educational session, presented by a professional consultant, on emerging trends for mutual insurance company boards of directors, which included climate related ESG trends. Also in 2021, the full Board agenda included a session on ESG and Grange's risk management approach, presented by Enterprise Risk Management. In 2022, we had a catastrophe modeling expert from Aon present to the full Board on various efforts underway to measure and manage climate change impacts for the P&C insurance industry. As stated above, the Board leverages the educational sessions to remain current on developing areas of importance, such as ESG and climate change.

RESPONDING TO QUESTION 1A: Describe the board and/or committee responsible for the oversight of climate-related risks and opportunities.

The Board provides oversight of the Enterprise Risk Management (ERM) function, including climate risk management, and maintains broad ownership of this role. Routine monitoring of ERM is delegated to the Audit Committee, is embedded within the Audit Committee's charter, and is a main component of the quarterly meetings.

In addition to the regular meetings of the Audit Committee as may be required to discuss its duties and responsibilities, the Audit Committee meets in executive session separately at least annually with the Grange Chief Risk Officer (CRO) and as a committee to discuss any matters that the Audit Committee or the CRO believe should be discussed privately.

RESPONDING TO QUESTION 1B: Describe management's role in assessing and managing climate-related risks and opportunities.

Grange's dedicated ERM function is accountable for embedding a risk-conscious culture throughout the enterprise, including a focus on climate related risk-based decision making. The ERM team operates with distinct, repeatable processes for timely identification of significant risks, robust assessments, and timely communication of these risks. These processes provide Grange with opportunities for continuous improvement and value-add through insights and feedback loops to respond to changes in our climate related risks and opportunities.

Climate related risk management is owned at the functional level, leveraging the Functional Risk Owner (FRO) role to influence risk-based behavior within their respective function. For example, as part of managing loss costs and assessing the adequacy of product pricing, underwriting and pricing functional leaders evaluate and report on Grange's experience from policyholder losses caused by weather events and influenced by climate risk. Commercial Lines and Personal Lines Pricing teams review the pricing assumptions regularly and ensure the weather-related portion is actuarially sound and in line with our view of weather exposures.

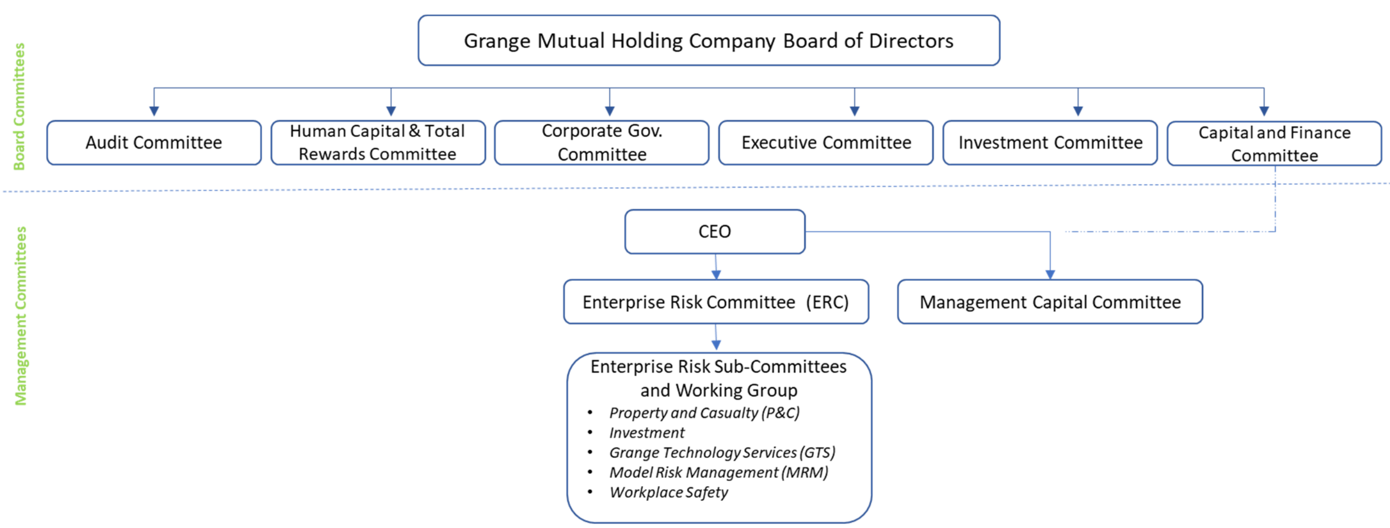
The Enterprise Risk Committee (ERC) is comprised of the Senior Leadership Team, the VP Chief Investment Officer, the VP Chief Actuary, ERM members, and the AVP Internal Audit, and is chaired by the CRO. Committee members convene on a bi-monthly basis to evaluate significant risks and exposures to the enterprise and approve "risk/reward trade-off" decisions. The Committee is collectively responsible for performing oversight of the broad enterprise risk management initiative, including climate related risk exposures. Significant matters from this committee are escalated to the Audit Committee of the Board.

Distinct risk sub-committees report up through the ERC and focus on risk-related topics at a function-specific level. Each risk sub-committee is comprised primarily of subject matter experts and leaders for each business area in addition to representatives from ERM and Internal Audit. Examples where climate-risk is integrated within the risk sub-committee include:

- *Property & Casualty Risk Sub-Committee*
  Underwriting incorporates climate risk considerations in underwriting appetite guides and letters of authority, which are presented to the Property & Casualty (P&C) Risk Sub-Committee for approval. In addition, the P&C Risk Sub-Committee evaluates and approves key reinsurance and catastrophe risk management strategies and approves pricing targets that reflect weather and climate-related risks.
- *Investment Risk Sub-Committee*
  The Investment Risk Sub-Committee considers climate-related risks among other risks as it evaluates investment strategies.

The diagram below illustrates the formal risk governance structure at Grange, ensuring a comprehensive approach to overseeing and managing risk, including present and emerging climate-related risk exposures.

FIGURE 2: GRANGE MUTUAL HOLDING COMPANY RISK GOVERNANCE STRUCTURE



II. STRATEGY

Closed-Ended Questions

1. Has the insurer taken steps to engage key constituencies on the topic of climate risk and resiliency? **No**
2. Does the insurer provide products or services to support the transition to a low carbon economy or help customers adapt to climate risk? **No**
3. Does the insurer make investments to support the transition to a low carbon economy? **No**
4. Does the insurer have a plan to assess, reduce or mitigate its greenhouse gas emissions in its operations or organizations? **No**

RESPONDING TO QUESTIONS 2, 2A, 2B, & 2C: 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. Describe the climate-related risks and opportunities the insurer has identified over the short, medium, and long term. Describe the impact of climate-related risks and opportunities on the insurer's business, strategy, and financial planning. Describe the resilience of the insurer's strategy, taking into consideration different climate-related scenarios, including a 2 degree Celsius or lower scenario.

Grange's mission is to provide peace of mind and protection to our policyholders during life's unexpected events, which includes the disastrous impacts of severe weather and Catastrophes ("Cats"). We proactively consider the evolving climate risk landscape and manage that risk to our capital both directly and through the purchase of reinsurance. Grange also has a long history of supporting relief efforts (*e.g.*, Hurricane Ian) as they arise through charitable foundations such as the American Red Cross.

We calculate capital requirements using a rating agency model and an economic capital model specific to Grange that provides an indication of capital required to cover an extreme 250-year event. The latter incorporates a sophisticated view of modeled catastrophes using industry-leading vendors (AIR Worldwide and RMS).

With respect to Cat modeling analytics, Grange considers the warm sea-surface temperature (WSST) stochastic event set in AIR and the near-term rate forecast in RMS to assess hurricane risk. The WSST view is a subset of stochastic events that represent heightened frequency during years with more favorable ocean temperatures for tropical cyclone formation in the North Atlantic basin. RMS's near-term (5-year) stochastic rates represent a forecast of activity in response to current and near-term fluctuations in environmental variables that influence hurricane activity.

Grange recognizes the limitations in severe thunderstorm modeling and uses deterministic scenarios to better understand "what-if" impacts if high-impact historical events were to occur in other areas of our footprint. For example, deterministic scenarios for the August 2020 Iowa Derecho were used to identify key exposure concentrations in other areas that would drive meaningful severe thunderstorm loss if the event occurred elsewhere. This work informed Grange's decision to purchase additional reinsurance over the 250-year model-indicated risk tolerance since the 2021 reinsurance treaty. Alternative deterministic analyses are also performed annually using historical tornado events with the goal of identifying alternative plausible non-modeled tail scenarios for the peril that may not be accurately captured in catastrophe models. Further, AIR released a new severe thunderstorm catastrophe model in 2022 that Grange has adopted. This includes additional historical information, new sources of data such as radar, a better derecho detection algorithm, and general improvements to vulnerability considering storms from 2013 through 2020.

Grange mitigates and balances exposure to hurricanes through monitoring and underwriting approaches by evaluating and limiting new business in near-coastal areas. This limits Grange's exposure to rising sea levels and heightened storm surge risk that may accompany any increase in hurricane frequency and severity as a result of climate change. In addition, internal zip code-level loss costs and exposure data, used to inform Grange's underwriting and pricing strategy, rating territories, and risk tolerances, are routinely refreshed to capture the latest model view of peril frequency throughout the enterprise footprint.

For the pricing of our policies, we follow a standard industry approach to estimating expected weather-related losses using a blend of actual and modeled weather losses. Rather than using a long-term history for the actual weather loss portion, we use a shorter history of the last 5 to 20 years (versus prior methods that used up to 30 years) to reflect the more recent weather patterns. Our economic capital model is updated annually to identify the change in volatility from weather risk. This change in volatility is reflected in our required economic capital and included in the pricing targets that are reviewed annually as part of our Economic Capital update. Our pricing varies based on the characteristics of the exposure that is covered. We gather verifiable information that can be used to differentiate risk based on characteristics of the property (*e.g.*, age, type, and condition of a roof). These characteristics are then factored into our prices and reduce the potential for adverse selection. The use of these property factors in our pricing also serves to educate and promote loss mitigation efforts by insureds.

In addition to these enterprise-wide strategic initiatives, the following apply to Grange's Corporate Finance, Commercial Lines, and Personal Lines strategies, respectively.

Corporate Finance

Grange has not explicitly altered its financial planning processes to reflect the impact of climate-related risks or to forecast the impacts of transitioning to a low carbon economy. However, climate-related risks are reflected implicitly within our premium, loss, and expense assumptions.

Grange senior management annually tests capital adequacy through stress scenarios, including severe weather and extreme catastrophic events.

Commercial Lines Products

Given our Commercial Lines product mix, geographic footprint, and risk appetite, Grange insures a relatively low volume of exposures subject to severe hurricane and flood risks as a percentage of overall exposure. We continuously evaluate risks based on climate related exposures as new data develops. As a member of ISO for our Commercial Lines business, new forms and rules are continually under evaluation to address these concerns. Our ISO suite of forms is further supported by proprietary forms to manage risk.

While Grange does not have plans or product offerings specifically targeted at encouraging a transition to a low-carbon economy, we do offer standard coverage forms or endorsements relevant to the increased costs of green building expenses. We can respond quickly to changing climate exposures because most of our policies are renewed annually. This gives us the flexibility to adjust our underwriting and pricing strategies and related policy terms and conditions when needed.

We integrate climate-related trends into our tactical solutions for Commercial Lines clients based on our monitoring of changes to weather patterns. Additionally, we continue to explore opportunities in underwriting and insuring emerging, next generation energy technologies such as solar.

Personal Lines Products

Grange insures a relatively low volume of exposures in geographic locations that are subject to severe hurricane and flood risks. We have not implemented products or services specifically targeted to supporting the transition to a low carbon economy or adapting to climate-related risks. We do, however, proactively reach out to agents and customers in imminent risk of major weather systems.

We can respond quickly to changing weather and climate exposures, because our policies are renewed on annual or six-month terms. This gives us the flexibility to adjust our underwriting and pricing strategies, and related policy terms and conditions when needed.

Regarding the consideration of different climate-related scenarios, such as 2-degree Celsius warming of the planet, work is underway. We are partnering with Aon (our reinsurance broker with world-class insurance analytics capabilities) and supporting its efforts to develop a more forward-looking catastrophe model that specifically contemplates climate change. As a participant in its research, we provided our portfolio data to Aon, and we will benefit from the results of the modeling that it develops in the coming years.

III. RISK MANAGEMENT

Closed-Ended Questions:

1. Does the insurer have a process for identifying climate-related risks? **<u>Yes</u>**
    a. If yes, are climate-related risks addressed through the insurer's general enterprise-risk management process? **<u>Yes</u>**
2. Does the insurer have a process for assessing climate-related risks? **<u>Yes</u>**
    a. If yes, does the process include an assessment of financial implications? **<u>Yes</u>**
3. Does the insurer have a process for managing climate-related risks? **<u>Yes</u>**
4. Has the insurer considered the impact of climate-related risks on its underwriting portfolio? **<u>Yes</u>**
5. Has the insurer taken steps to encourage policyholders to manage their potential climate-related risks? **<u>No</u>**
6. Has the insurer considered the impact of climate-related risks on its investment portfolio? **<u>No</u>**
7. Has the insurer utilized climate scenarios to analyze their underwriting risk? **<u>No</u>**
8. Has the insurer utilized climate scenarios to analyze their investment risk? **<u>No</u>**

RESPONDING TO QUESTIONS 3, 3A, 3B, & 3C: Disclose how the insurer identifies, assesses, and manages climate-related risks. Describe the insurers' processes for identifying and assessing climate-related risks. Describe the insurer's processes for managing climate-related risks. Describe how processes for identifying, assessing, and managing climate-related risks are integrated into the insurer's overall risk management.

The Grange governance framework promotes risk oversight through a dedicated enterprise risk management function.

Grange leverages a quarterly enterprise risk report to identify, monitor, and report efforts to manage current and emerging climate change risks through the Enterprise Risk Committee, the Board's Audit Committee, and the full Board. This risk report is also integrated within our annual Own Risk and Solvency Assessment (ORSA) submitted to the Ohio Department of Insurance.

Reinsurance

As indicated in mentioned in Section II, we purchase catastrophe reinsurance to limit weather and climate-related exposures from our policies to manageable levels.

While recent weather patterns are increasing in severity, this trend is reflected in Cat model event sets over time. As a result, we recognize the risk of "model miss" when targeting appropriate catastrophe reinsurance coverage to some degree. In the near term, we are mitigating this by relying on recent weather experience. We are also purchasing reinsurance above catastrophe model indications.

Additionally, as part of the annual reinsurance renewal, a counterparty credit risk evaluation is completed for all reinsurers. The key requirements evaluated as part of this review provide assurance that we are placing coverage with reinsurers that have strong ratings and financial strength. We also limit the amount of coverage placed with any single counterparty to minimize the impact of a default.

Grange has also developed a monitoring framework for severe convective storms and exposure concentrations. Additionally, we have established risk tolerances for hurricanes and earthquakes and have the following tools in place to monitor against those tolerances.

- Severe Convective Storm/ Concentration risk thresholds are set such that potential damage within a region does not exceed the limit of our catastrophe reinsurance coverage.
- For hurricane risk, we use market share. Tier 1 (highest risk) counties are limited to 1 percent of market share. Tier 2 counties are limited to 2 percent of market share.
    - Tier 1 reflects counties that are on the coast.
    - Tier 2 reflects counties that are adjacent to Tier 1 counties.
    - Tier definitions were determined by a group consisting of representatives from the Enterprise Risk Management, Commercial Lines Product, and Personal Lines Product teams, and approved by the Property and Casualty Risk Sub-Committee.
- Earthquake risk thresholds are set so that aggregate losses per zip code, based on deterministic damage ratios, do not exceed the limit of our catastrophe reinsurance coverage.

Additionally, Grange supports the Insurance Institute for Business & Home Safety (IBHS), a 501(c)(3) organization, through membership and Grange associate Board representation as a means of understanding and advancing climate related risk resilience. IBHS conducts objective, scientific research to identify and promote effective actions that strengthen homes, businesses, and communities against natural disasters and other causes of loss. IBHS research focuses on wildfire, rain, hail, and wind risks, including efforts to understand and reduce the damage from severe convective storms, tornadoes, and straight-line wind.

While we have not formally considered the impact of climate change on our investment portfolio at the security level, we do have an investment strategy that limits investment in small municipalities with coastal hurricane exposures or catastrophic earthquake exposures. Additionally, we leverage an investment consultant to assist with oversight of asset managers to ensure proper focus on critical risk mitigation strategies in portfolio management. We also have a robust framework for liquidity management that ensures that we can pay policyholder claims in a 1-in-250-year model-indicated catastrophe stress event.

IV. METRICS AND TARGETS

Closed-Ended Questions

1. Does the insurer use catastrophe modeling to manage your climate-related risks? **Yes**
2. Does the insurer use metrics to assess and monitor climate-related risks? **Yes**
3. Does the insurer have targets to manage climate-related risks and opportunities? **Yes**
4. Does the insurer have targets to manage climate-related performance? **Yes**

RESPONDING TO QUESTIONS 4, 4A, & 4C: Disclose the metrics and targets used to assess and manage relevant collateralized risks and opportunities where such information is material. Disclose the metrics used by the insurer to assess climate-related risks and opportunities in line with its strategy and risk management process. Describe the targets used by the insurer to manage climate-related risks and opportunities and performance against targets.

As mentioned in the prior sections, Grange uses Catastrophe modeling to measure weather- and climate-related risks. Grange leverages several metrics and targets in coordination with modeled event analysis to manage severe weather and climate risk exposure. Areas that were mentioned previously that also apply to this section are summarized below.

Modeled Catastrophe Results and Reinsurance

We purchase catastrophe reinsurance up to, and slightly above, the 1-in-250-year model-indicated results to protect against extreme events. This helps to limit our weather- and climate-related risk exposures on our policies to manageable levels.

Our 1-in-250-year modeled event, net of reinsurance, relative to surplus is 3.9 percent in 2023, compared to 2.4 percent in 2022. This metric allows us to better understand the risk we would retain in an extreme weather event. Our increased retention was the result of a hardening reinsurance market and available capacity. The limit of our catastrophe treaty is above the 1-in-250-year modeled event gross of reinsurance, providing us with sufficient coverage against extreme catastrophes.

Underwriting

We have established risk tolerances for severe convective storms, hurricanes, and earthquakes and tools in place to monitor against those tolerances:

- Severe Convective Storm/ Concentration risk thresholds are set such that potential damage within a region does not exceed the limit of our catastrophe reinsurance coverage.
- For hurricane risk, we use market share. Tier 1 (highest risk) counties are limited to 1 percent of market share. Tier 2 counties are limited to 2 percent of market share.
- Earthquake risk thresholds are set so that aggregate losses per zip code based on deterministic damage ratios do not exceed the limit of our catastrophe reinsurance cover.

As the science around climate risk evolves in the property and casualty industry, we will continue to adapt and refine our efforts. As indicated in Section II above, we will benefit from the results of climate change modeling that our partner Aon is developing.

RESPONDING TO QUESTION 4B: Disclose Scope 1, Scope 2, and if appropriate, Scope 3 greenhouse gas (GHG) emissions, and the related risks.

While Grange does not directly track Scope 1, Scope 2, or Scope 3 greenhouse gas (GHG) emissions, opportunities to reduce our climate impacting footprint (*e.g.*, energy efficient buildings, drone use for claim inspections, remote work, and paperless billing) are performed as part of our normal operations.

Within our Claims operations, the continued advancement of technology supporting virtual adjustment of auto and property claims has reduced the need for travel for loss inspections. Additionally, the utilization of a paperless web-based Claims Management System, customer texting and digital payment options are performed as part of our normal operations.

Since 2016, Grange has received environmental accolades with Leadership in Energy and Environmental Design (LEED) certifications from the U.S. Green Building Council for its headquarters in Columbus, Ohio. This certification represents a continuous effort by Grange to adhere to several environmentally rigorous standards. Grange also offers remote and hybrid work options for associates, which reduces our contributions to carbon emissions from commuting. Additionally, we encourage our insurance customers to select paperless billing and leverage our website for access to electronic documents. Offering paperless options protects the environment, enhances the customer experience, and reduces our use of ink and electricity.