Independent Expert Report

The Proposed Insurance Business Transfer from The Hanover Insurance Company to National Legacy Insurance Company

Prepared for the Oklahoma Insurance Department

June 20, 2023

June 20, 2023

The Honorable Glen Mulready
Oklahoma Insurance Commissioner
Oklahoma Insurance Department
3525 NW 56th Street, Suite 100
Oklahoma City, OK 73112

Dear Commissioner Mulready:

Please find attached a copy of the Independent Expert's Report on the Proposed Insurance Business Transfer from The Hanover Insurance Company to National Legacy Insurance Company.

This report replaces and supersedes the draft report issued on June 5, 2023.

This report contains workpapers, trade secrets, and confidential information of The Hanover Insurance Company, National Legacy Insurance Company and WTW, and as such, it is not intended to be subject to disclosure requirements under any Freedom of Information Act or similar laws.

Attention is called to the section of the report entitled *Distribution*, which sets out the limits on distribution of the report.

The author of this report, Sandra Santomenno, is a member of the American Academy of Actuaries and meets its qualification standards to render the actuarial opinion contained herein.

WTW appreciates the opportunity to provide Independent Expert services to the Oklahoma Insurance Department and the District Court of Oklahoma County. If you have questions or comments, please feel free to call the Independent Expert, Sandra Santomenno, at 862-222-0234.

Sincerely,

Sandra C. Santomenno

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Section 1: Purpose and Scope

WTW was retained by National Legacy Insurance Company (NLIC or *Assuming Reinsurer*), a subsidiary of R&Q Insurance Holding, Ltd. (R&Q), The Hanover Insurance Company (Hanover or *Transferring Reinsurer*) and the Oklahoma Insurance Department (OID) to provide Insurance Business Transfer ("IBT") Independent Expert services.

The Oklahoma Insurance Business Transfer Act (the Act, 36 Okla. Stat. §§ 1681-1688) enables the transfer and novation of a portfolio of insurance policies in that policies are completely separated from one insurance company and moved to another as if the Assuming Company had issued the original policies rather than the Transferring Company. The transfer of policies is effected by order of the Court after review and approval by the Commissioner with the assistance of an independent expert (IE).

Hanover is proposing the transfer of its liabilities within the Excess and Casualty Reinsurance Association (ECRA) pool to NLIC, an Oklahoma domiciled insurance company. The IBT is planned to be effective during 2023 depending on the schedule of the Court. This report is prepared for the Oklahoma Insurance Department Commissioner (Commissioner) and the District Court of Oklahoma County (Court) for the purpose of understanding and assessing the effect of the proposed IBT on policyholders. This report was prepared under the terms of the Independent Expert Agreement dated February 16, 2022 and signed on March 24, 2022.

This report, as required by the Act, describes the proposed IBT and its potential impact on policyholders and is provided to assist the Court in assessing the impact of the proposed IBT on the policyholders of Hanover and NLIC, including the effect of the IBT on the security of policyholders and the level of administrative service provided to policyholders by the respective insurance companies. The report has been prepared solely for the purpose of assessing the impact of the IBT to meet the requirements of the Act. This report is not intended nor necessarily suitable for any other purposes and I accept no responsibility for any such use.

Draft versions of this report should not be relied upon by any person for any purpose.

The exhibits and appendices attached in support of my conclusions are an integral part of this report. These sections have been prepared so that my actuarial assumptions and judgments are documented. This report must be considered in its entirety as individual sections may be misleading if considered in isolation. My projections are predicated on several assumptions as to future conditions and events. These assumptions are documented in subsequent sections of this report and should be understood to place the actuarial estimates in their appropriate context. In addition, these projections are subject to several reliances and limitations, as described in subsequent sections of this report.

This report was prepared for use by persons technically competent in the areas addressed and with the necessary background information, and for the stated purposes only. I am available to answer any questions that may arise regarding this report. I assume that the users of this report will seek such explanation on any matter in question.

For the purposes of this report, the “accounting date” December 31, 2021, is the date used to separate paid and unpaid claim amounts in the Hanover’s and NLIC’s financial statements. Transactions through the “valuation date” of December 31, 2021 are included in the data used in my analysis. No account has been taken in the projections of developments subsequent to the “review date” of December 31, 2021. It remains to be seen how much impact higher levels of inflation may have on the payment of future claims. While I have not made adjustments to the best estimates provided by other credentialed actuaries to account for the recently higher inflation environment, I have contemplated the impact of increases in interest rates and inflation in my scenario testing to account for such potential impacts. That is, the stochastic modeling and scenario testing performed in support of this review make considerations for reasonable adverse fluctuations in claim emergence that could be caused by changes in the litigation or economic environment. It should be noted that while increases in inflation could lead to higher claim payments in the future, the increases in investment income should lead to more favorable investment results than are contemplated herein.

Section 2: Distribution

I have prepared this report for The OID 's internal use as described in the preceding section. It was also prepared for NLIC and Hanover ("the Companies"). It was not prepared for use by any other party and may not address their needs, concerns, or objectives.

With the exception of the Companies, the IE's Opinion Report shall remain confidential until the OID authorizes, in writing, the companies to apply to the Court for approval of the transaction.

I understand that the Companies may wish to provide copies of this report to other regulators or their respective external auditors, (the Recipients) in the course of the Recipients' standard duties. Permission is hereby granted for such distribution on the conditions that:

- WTW is provided a list of the Recipients to whom this report is provided
- The report is distributed in its entirety
- Each Recipient recognizes that WTW is available, at the expense of NLIC and Hanover and with their prior consent, to answer any questions concerning the report
- Each Recipient agrees not to reference or distribute the report to any other party
- Each Recipient recognizes that the furnishing of this report is not a substitute for its own due diligence and agrees to place no reliance on this report or the data contained herein that would result in the creation of any duty or liability by WTW to such party
- In the event that the Recipient is required by order of a court of competent jurisdiction, administrative agency or governmental body, or by any law, rule, regulation, subpoena, or any other administrative or legal process to disclose this report, the Recipient may disclose this report, provided that the Recipient gives WTW prompt notice of any such requirement and, at our discretion, either (1) cooperates with us, at our expense, to prohibit such disclosure, or (2) uses all reasonable efforts to obtain confidential treatment of this report under a protective order or other appropriate mechanism.
- Each Recipient understands that such RECIPIENT IS DEEMED TO HAVE ACCEPTED THESE TERMS AND CONDITIONS by retaining a copy of this report

This report contains workpapers, trade secrets, and confidential information of the OID, NLIC, Hanover and WTW. Because of the nature of the material contained in the report, it is not intended to be subject to disclosure requirements under any Freedom of Information Act or similar laws.

The Companies shall not refer to WTW or include any portion of this report in any shareholder communication or in any offering materials or fairness opinion provided by your professional advisors prepared in connection with the public offering or private placement of any security, unless otherwise agreed in writing.

No further distribution of this report and any related information or advice, nor reference, either oral or written, to WTW, our analysis or findings related to this report may be made other than agreed by us in advance in writing. WTW may permit disclosure of this report to other third parties, conditional on each third-party agreeing to Disclaimer and Release terms acceptable to WTW.

I understand further that, upon approval by the Court, this report may be placed in the public record in relation to the Court approval of the IBT.

I do not assume any responsibility, or accept any duty of care or liability, to any third party who may obtain a copy of this document and any reliance placed by such party on it is entirely at their own risk

Section 3: Background

Overview

The Oklahoma Insurance Business Transfer Act (the Act, 36 Okla. Stat. §§ 1681-1688) enables the transfer and novation of a portfolio of insurance policies in that policies are completely separated from one insurance company and moved to another as if the Assuming Company had issued the original policies rather than the Transferring Company. The transfer of policies is effected by order of the Court after review and approval by the Commissioner with the assistance of an independent expert (IE). This report, as required by the Act, describes the proposed IBT and its potential impact on policyholders and is provided to assist the Court in assessing the impact of the proposed IBT on the policyholders of Hanover and NLIC, including the effect of the IBT on the security of policyholders and the level of administrative service provided to policyholders by the respective insurance companies. The report has been prepared solely for the purpose of assessing the impact of the IBT to meet the requirements of the Act.

As the policies proposed to be transferred are reinsurance policies resulting from Hanover's participation in a reinsurance pool, the transferring policyholders will be referred to as the "transferring reinsureds" throughout this report. The term "insurance" is used to include both insurance and reinsurance. The term "insurer" is used to include a provider of both insurance and reinsurance business. Appendix A provides a glossary of terms used in the report.

Role of the Independent Expert

The Independent Expert is charged with assisting the Commissioner and the Court with assessing the relevant facts and circumstances surrounding the proposed IBT and must demonstrate independence and sufficient skill, experience, and resources to provide an opinion on whether the IBT will have a material adverse impact on policyholders. The Independent Expert is appointed by the Commissioner for each IBT, selected from two nominees submitted jointly by the Transferring and Assuming Companies.

I, Sandra Santomenno, have been appointed by the Commissioner to serve as the Independent Expert for the proposed IBT between Hanover and NLIC. WTW entered into an Independent Expert Agreement with the OID, Hanover and NLIC, dated February 16, 2022, governing the specific terms of my work.

I am a Senior Director in the Insurance, Consulting and Technology practice of WTW, an associate of the Casualty Actuarial Society and Member of the American Academy of Actuaries. I have more than 42 years of experience practicing as a Property and Casualty actuary.

In particular, I have relevant experience with asbestos and environmental exposure (A&E) for insurance companies, captive insurers, and self-insured entities and experience with run-off entities. As such, I have the appropriate credentials to evaluate the reserve levels and capital testing for property/casualty insurance liabilities. Additional information on my experience is included in Appendix B.

Due to the recent passage of the Act in 2018 establishing IBT in the United States and the limited number of prior domestic IBT transactions, I have not previously served as an IE. However, I have consulted with WTW colleagues in the United Kingdom with extensive experience in Part VII Transfers. IBT transactions and procedures established by the Act are similar in substance to the Part VII Transfers, which have been common in the United Kingdom market for 20 years.

The OID stipulates the following requirement for an Independent Expert:

"Independent expert" means an impartial person who has no financial interest in either the assuming insurer or transferring insurer, has not been employed by or acted as an officer, director, consultant or other independent contractor for either the assuming insurer or transferring insurer within the past twelve (12) months, is not appointed by the Commissioner to assist in any capacity in any proceeding initiated pursuant to Article 18 or Article 19 of Title 36 of the Oklahoma Statutes and is receiving no compensation in connection with the transaction governed by this act other than a fee based on a fixed or hourly basis that is not contingent on the approval or consummation of an Insurance Business Transfer and provides proof of insurance coverage that is satisfactory to the Commissioner.

I attest to the fact that my project team has read and understands the guidance outlined above and confirm that the members of the project team have no direct or indirect interest in the transferring or assuming (re)insurer or any of their respective affiliates. In addition, I confirm I have not been appointed by the Oklahoma Commissioner under any proceeding pursuant to Article 18 or Article 19 of Title 35 of the Oklahoma Statutes. Furthermore, I confirm that the fee for my service as an Independent Expert is not contingent on any outcome or conclusion.

As a large global organization, WTW, from time to time, has performed reserving, human capital, and due diligence work on behalf of Randall & Quilter Investment Holdings (R&Q Group), the parent company of R&Q as well as Hanover and its family of companies as further indicated below.

WTW was engaged to perform the 2021 and 2022 actuarial opinion for Accredited Surety and Casualty Company (“Accredited” or “ASC”), a subsidiary of R&Q. This work included a review of the liabilities related to the ECRA portfolio, as that portfolio has been temporarily ceded from Hanover to Accredited pending approval of the transfer of those liabilities to NLIC. That review may or may not have included an independent estimate of the ECRA liabilities, at the discretion of the WTW actuary appointed by Accredited. So as to avoid the appearance of a conflict of interest and to ensure the confidentiality of any information furnished to us under each engagement, I have utilized separate and isolated teams of employees to perform this engagement and the Accredited engagement, subject in all cases to professional standards oversight. I have not shared any information among the teams where I am required to utilize separate and isolated teams.

Given WTW’s annual revenue of over $8 billion, the previous assignments are immaterial to the firm.

I believe that neither WTW’s prior work nor relationships with R&Q, R&Q Group and Hanover impede my ability to act as an independent expert on this assignment, as I am able to assure the independence of the individuals working on each project. As a global consulting company that offers a broad range of services and products, WTW has a clear approach and processes to avoid entering into conflicts of interest. In all of our dealings, we are fully transparent. WTW is not an audit firm, so we are less likely to have conflicts from other projects we are engaged in with the same client.

To achieve this independence, WTW verifies that no conflicts of interest exist except as indicated below and continually monitor our relationships and services to confirm that none emerge. Our approach and processes are set out in our companywide *Code of Conduct* and our *Excellence* quality program. For certain circumstances, additional measures apply.

Because of the actions planned above, I do not view any of this work as an impediment to my independence on this engagement.

Section 4: Findings

Hanover is proposing an Insurance Business Transfer (IBT) of its unpaid claims liabilities that were assumed through reinsurance of the ECRA pool to NLIC. NLIC is an Oklahoma domiciled company established in 2019. The IBT is planned to be effective during 2023. ECRA is a reinsurance pool that underwrote property and casualty risks between 1948 and 1982. The pool is comprised of numerous insurance and reinsurance companies that collectively reinsured a variety of commercial risks originally insured under policies issued by ceding insurers (who may or may not be members of ECRA assuming reinsurance from the pool). The majority of the pool's remaining unpaid losses are expected to relate to asbestos, pollution/environmental, and other mass tort liabilities. Hanover's recorded loss and loss adjustment expense reserve for its assumed reinsurance participation in the pool was approximately $35.1 million at December 31, 2021. These liabilities have been reinsured by Accredited, an NLIC affiliate, beginning in 2021. In the proposed IBT, Hanover's assumed reinsurance liabilities from the ECRA pool will be transferred to NLIC, terminating Hanover's liability for the exposure, and the reinsurance provided by the NLIC affiliate will be commuted.

TABLE 1
Transferred Unpaid Loss and LAE as of December 31, 2021

	Hanover Carried Reserves
Gross Unpaid Loss and LAE	
a. Case Reserves	$7.1
b. IBNR Loss and LAE	28.0
d. Total	$35.1
Ceded Unpaid Loss and LAE	35.1
Net Unpaid Loss and LAE	$0.0

I have considered the proposed IBT and the likely effect of the IBT on the Hanover policyholders who will not be transferred, the reinsured whose liabilities will be transferred and the NLIC reinsured from a previous IBT. As noted elsewhere in the report, there are no current policyholders of NLIC.

Based on my review, I have reached the following conclusions:

- Reserves to be recorded by NLIC after the transfer for unpaid losses and associated expense for claims handling appear reasonable based on my understanding of the methodologies used in the provided actuarial reserve studies, the reasonability of key assumptions and my review of reserve diagnostics.

- The financial condition of Hanover will not be materially changed by the IBT and, therefore, the IBT will have no discernible impact on the policyholders remaining with Hanover.

- NLIC is a strongly capitalized but smaller, less diversified reinsurer than Hanover. Based on testing of a range of adverse outcomes for total claims and investment yields, I am satisfied that the likelihood of ECRA claims not being paid by NLIC is sufficiently small as to be immaterial and that therefore neither NLIC's existing reinsureds nor the transferring reinsureds will be materially adversely impacted by the IBT.

- NLIC plans for administration of the ECRA reinsurance claims to remain with Excess & Treaty Management Corporation (ETMC), the entity managing the ECRA pool since 1959. There will be no change to the transferring reinsureds' policyholder experience as a result of the IBT.

- NLIC has an appropriate corporate governance structure to ensure proper board and management oversight. NLIC management has appropriate expertise to manage the transferring reinsurance business after the IBT.

- The strategy to communicate the IBT plan and hearing information to the Hanover policyholders, transferring reinsureds, and other stakeholders as required by the Act is reasonable and appropriate for the various parties to be notified.

- In my opinion, the IBT does not materially, adversely impact the Hanover policyholders, the current reinsureds at NLIC, or the reinsureds in the business being transferred from Hanover to NLIC.

COVID-19

COVID-19 is a continually developing issue which is having significant effects on global economic activity and has created extensive social disruption. The impact on projected liabilities remains highly uncertain, as discussed further in the following sections of this report. I considered the effects of COVID-19 on the Companies' experience, including loss and loss adjustment expense experience and claim handling as discussed in the subsequent sections of this report.

Inflation

Recent changes in general inflation, particularly in the cost of materials and labor costs, could have an impact on the run-off of reserves. As of the review date of this report, our view was that inflation spikes are most likely to impact short-tailed lines, principally in accident years 2021 and 2022, and the exposures that are subject to this IBT are much longer-tailed. However, we recognized that the potential existed for longer term inflation pressure which could impact wage, medical and legal costs, therefore impacting longer tailed lines such as general liability. Such inflation increases could also impact the run-off of the reserves for many accident years. It remains to be seen how much impact higher levels of inflation may have on the payment of future claims. While I have not made adjustments to the best estimates provided by other credentialed actuaries to account for the recently higher inflation environment, I have contemplated the impact of increases in interest rates and inflation in my scenario testing to account for such potential impacts. That is, the stochastic modeling and scenario testing performed in support of this review make considerations for reasonable adverse fluctuations in claim emergence that could be caused by changes in the litigation or economic environment.

Section 5: Analysis

My evaluation of the IBT is described in the sections below. Additional details regarding the analysis are provided at the end of this section. Further details can be provided upon request.

Overview of Significant Parties

The Hanover Insurance Company (Transferring Company), a member of the The Hanover Insurance Group, is a regional provider of personal and commercial property and casualty insurance products. The transferring company is domiciled in New Hampshire. The table below summarizes the loss and loss adjustment expense reserves recorded in Hanover's statutory annual statement at December 31, 2021, by Schedule P line of business.

Schedule P Line		Net Reserves (in $millions)	Percent of Total
1A	Homeowners	136	3%
1B	Private Passenger Auto Liabilty	389	9%
1C	Commercial Auto Liability	502	12%
1D	Workers Compensation	606	14%
1E	Commercial Multi Peril	1,381	32%
1F -1	Medical Professional Liability Occurrence	11	0%
1F - 2	Medical Professional Liability Claims Made	18	0%
1G	Special Liability	39	1%
1H - 1	Other Liability Occurrence	524	12%
1H - 2	Other Liability Claims Made	345	8%
1I	Special Property	132	3%
1J	Auto Physical Damage	16	0%
1K	Fidelity/Surety	80	2%
1L	Other	120	3%
1M	International	2	0%
1N	Reinsurance Property	0	0%
1O	Reinsurance Liability	-	0%
1P	Reinsurance Financial Lines	-	0%
1R - 1	Products Liability Occurrence	58	1%
1R - 2	Products Liability Claims Made	3	0%
1S	Financial Guaranty	-	0%
1T	Warranty	-	0%
Total		4,363	

As shown in the table above, Hanover recorded $4.363 billion in net loss and loss adjustment expense reserves as of December 31, 2021. Nearly one third of this liability comes from Commercial Multi-Peril exposures. Furthermore, just over 20% of these liabilities are from personal and commercial auto liability exposure, an additional 20% are comprised of Other Liability exposures, and 14% are related to Workers' Compensation exposure. The liabilities subject to the proposed IBT comprise less than 1% of Hanover's total net loss and expense reserve at December 31, 2021.

Going forward, Hanover would like to achieve finality on these latent exposures. In Q3 2021, Hanover entered into an agreement with Accredited Surety and Casualty Company Inc., an affiliate of NLIC, to cede 100% of the liabilities associated with the ECRA pool. As of December 31, 2021, Hanover recorded $35.1 million for these liabilities with an offsetting reinsurance recoverable from ASC. As part of the IBT, the reinsurance provided by ASC will transfer from Hanover to NLIC, but at the culmination of the proposed IBT of these liabilities to NLIC, the reinsurance agreement between ASC and NLIC will be commuted.

NLIC (Assuming Company) is an Oklahoma domiciled insurance company established in 2019. NLIC is a wholly owned subsidiary of Randall & Quilter America Holdings Inc., which is ultimately owned by Randall & Quilter Investment Holdings Ltd.

R&Q Group was founded by Ken Randall and Alan Quilter in 1991, and an area of its operations focus on acquiring discontinued insurance and reinsurance books of business and managing the runoff of these remaining liabilities. R&Q Group owns and operates a portfolio of companies located in the United States, United Kingdom, and Europe.

Excess Treaty Management Corporation (ETMC) is the pool manager for ECRA and was acquired by R&Q Group in 2010. ETMC operates independently of NLIC and will continue to manage the ECRA pool after the completion of the IBT between Hanover and NLIC.

Overview of Subject Liabilities

ECRA is a reinsurance pool that underwrote property and casualty risks between 1948 and 1982. The pool is comprised of numerous insurance and reinsurance companies that collectively reinsured a variety of commercial risks originally insured under policies issued by ceding insurers (who may or may not be members of ECRA assuming reinsurance from the pool).

ECRA assumed a variety of commercial risks throughout its years of operations, but since it ceased underwriting in 1982, the majority of its claims have been paid. The majority of the pool's remaining unpaid losses as of December 31, 2021, are expected to relate to asbestos, pollution/environmental, and other mass tort liabilities, which take many years to ultimately resolve due to their latent nature. That is, asbestos claims continue to emerge decades after initial exposure due to the long latency period of illnesses caused by exposure to asbestos. Similarly, pollution and environmental liability may result from contaminants produced from past operations that take many years to discover, and mass torts may emerge as products or practices from past operations are later identified to cause injury, illness, or damage. Consequently, while most of the claims emanating from shorter-tailed exposures, such as property and simpler liability coverages, have been settled, there remain unsettled claims associated with this latent exposure.

The unpaid liability reinsured by ECRA across all cedants is pooled and then allocated to each participating company based on assumed share percentages for each policy year. Participants could enter and exit the pool as well as change their participation percentage from year to year. Hanover's participation percentages by year are displayed in the table below.

Policy Year	Participation Percentage
1948	2.50%
1949	2.50%
1950	2.00 - 2.50%
1951	2.00 - 2.10%
1952	2.00 - 2.10%
1953	2.00 - 2.50%
1954	2.00 - 2.50%
1955	3.40 - 5.00%
1956	4.55 - 5.00%
1957	5.00 - 5.05%
1958	5.05 - 6.00%
1959	4.85 - 5.72%
1960	4.61 - 5.33%
1961	4.31 - 5.15%
1962	2.34 - 3.86%
1963	2.83 - 3.73%
1964	2.60 - 3.38%
1965	2.35%
1966	2.29 - 2.46%
1967	2.76 - 3.02%
1968	2.80 - 3.11%
1969	2.79 - 3.16%
1970	2.99 - 3.49%
1971	2.88 - 3.34%
1972	2.37 - 2.51%
1973	1.57%
1974	2.22%
1975	2.34%
1976	2.34%
1977	2.24%
1978	2.06%
1979	1.85%
1980	1.74%
1981	1.67%
1982	1.15%

As shown in the table above, Hanover participated in the ECRA pool in policy years 1948 through 1982, and over that time, their participation ranged between 1% and 6%. For years with multiple percentages shown, I note that participation percentages differ between property and liability coverages.

Transfer Details

As discussed above, Hanover is proposing to novate its contractual obligations and transfer its assumed reinsurance liabilities from the ECRA pool to NLIC.

Hanover will not transfer any assets in this IBT beyond the $35.1 million that has already been paid to ASC for the 100% quota share. Hanover entered into this quota share with ASC to immediately transfer their obligations to pay current and future ECRA claims to ASC with the intent to ultimately complete an IBT to NLIC to achieve legal finality on these exposures. As a result of this IBT, Hanover's assumed reinsurance liabilities from the ECRA pool will be transferred to NLIC, which will eliminate any future obligations from Hanover to pay claims in the ECRA pool. That obligation will be fully transferred to NLIC, and the quota share between NLIC and ASC will be commuted. The remaining premium held by ASC for this quota share will be transferred to NLIC simultaneously with the IBT, subject to the regulatory approval of the IBT by the OID. Between date of quota share agreement with Hanover and December 31, 2021, ASC paid claims to ECRA totaling $0.3 million, leaving $35.1 million of the total reinsurance premium and transfer price to be transferred to NLIC.

ETMC has been appointed by the ECRA pool to manage all of the claims and settlements associated with the pool. ETMC provides billing statements, outstanding case reserves, and incurred but not reported ("IBNR") reserve reports to each of the pool members at intervals agreed to by ETMC and each pool member. Hanover receives monthly updates from ETMC. After the IBT, ETMC will continue to manage the claims handling and billing for the pool, but ETMC will correspond directly with NLIC rather than Hanover as NLIC will have taken over Hanover's position in the ECRA pool.

ASC has been paying since 2021 as a result of their reinsurance arrangement with Hanover. Because ASC and NLIC are both members of R&Q, I anticipate that there will be no significant impact to either policy administration or claims handling practices for claims submitted by transferring reinsureds to ECRA and its manager, ETMC.

My understanding is that this transaction would be effective in 2023. Because the most recent reserve information I have is as of December 31, 2021, my analysis of reserves is based on that most recent evaluation. Because my evaluation of balance sheet impacts for NLIC relies on their pro forma financial statements, I consider anticipated runoff of these reserves to year-end 2023 in that assessment.

Impact of Transfer on Loss Reserves and Reserve Adequacy

Loss and LAE reserves as of December 31, 2021 for each company before and after the proposed IBT are summarized in the table below. Please note that these are hypothetical values assuming IBT were made effective December 31, 2021 and are for illustrative purposes only.

Comparison of Loss and LAE Reserves
Evaluated at December 31, 2021
Data in $000s

	Hanover Before IBT	Hanover After IBT	Change	NLIC Before IBT	NLIC After IBT	Change
Gross of Reinsurance	5,141,300	5,106,191	(35,109)	2,631	35,601	32,970
Ceded	778,310	743,201	(35,109)	0	32,970	32,970
Net of Reinsurance	4,362,990	4,362,990	0	2,631	2,631	0

Because ASC reinsures Hanover for the entirety of the business being transferred through this IBT, the IBT has no impact on Hanover's net liabilities. On a gross of reinsurance basis, transferring the ECRA liabilities from Hanover to NLIC reduces Hanover's loss and LAE reserves by less than 0.7% of their pre-transfer loss and LAE liabilities gross of reinsurance, which does not result in a material change to Hanover's liabilities.

There is a difference between the recorded loss and LAE reserve estimates of the transferring reinsured liabilities for Hanover and NLIC evaluated at December 31, 2021, with NLIC's reserves of $32.9 million being $2.1 million smaller than the reserves recorded by Hanover. Hanover is recording their reserve based on the IBNR provided by ETMC in quarterly arrears, while NLIC records their reserve without a lag. Additionally, between the latest ECRA evaluation performed by Milliman and the date Hanover entered into the quota share with ASC, Hanover had been strengthening its ECRA reserves by approximately $0.1 million per month. This additional reserve of $2.1 million reflects only approximately 0.04% of Hanover's total loss and LAE reserve gross of reinsurance as of 12/31/21 and is therefore immaterial to their overall reserve position.

The IBT is expected to conclude in 2023, so for illustrative purposes, I have used the pro forma financial statement information provided by NLIC to estimate the projected impact of the IBT on the NLIC's loss and LAE reserve as of December 31, 2023, which is summarized in the table below.

Comparison of Loss and LAE Reserves
Evaluated at December 31, 2023
Data in $000s

	NLIC Before IBT	NLIC After IBT	Change
Net of Reinsurance	2,439	32,604	30,166

Assessment of Loss and Expense Reserve Adequacy

The unpaid loss and loss adjustment expense liabilities that are being transferred from Hanover to NLIC have been reviewed by multiple actuarial firms for different purposes. Periodically, Milliman provides a review of the total liabilities for the ECRA pool which then gets communicated to the participating members through ETMC.

As of the time of writing this report, the most recent Milliman review was conducted using data evaluated as of August 31, 2019. Hanover established their loss and expense liability reserve for the ECRA exposures as of December 31, 2021 by adjusting Milliman's estimate for unpaid loss as of August 31, 2019 for payments made between August 31, 2019 and December 31, 2021, with an additional accrual of approximately $0.1 million per month, as discussed above, in the roll forward period up until entering into a quota share with ASC, which was meant to offset the reduction in liability from loss payments made each month.

ASC established $33.0 million for these liabilities as of December 31, 2021. While this is $2.1 million lower than the loss and expense reserve recorded by Hanover, it is based on the estimates provided by ETMC based on the Milliman report without any of the adjustments Hanover applied. Additionally, in support of ASC's Statement of Actuarial Opinion at December 31, 2021, a separate team of actuaries at WTW reviewed the loss and expense liabilities that ASC recorded for these ECRA exposures. In support of this IBT assessment, I have taken steps to separate the team involved with producing this report from the WTW actuaries that provided support for ASC's 2021 Statement of Actuarial Opinion to maintain independence.

I have reviewed the two independent actuarial reports and supporting exhibits to understand the methods, assumptions, and conclusions of each study. Specifically, I considered the key assumptions related to the estimate of unpaid claims, the actual claims emergence between the evaluation date of the Milliman study and December 31, 2021, survival ratio diagnostics by exposure, unpaid to case reserve ratios, and projected payment patterns.

I have confirmed that the booked reserves recorded by ASC for this business as of December 31, 2021 are consistent with the amounts estimated by Milliman as of August 2019 adjusted for actual payments through year-end 2021. Furthermore, based on my review of the Milliman report, I have concluded that Milliman's estimates for the ECRA pool are reasonable. I have also confirmed that the reserve recorded by ASC at December 31, 2021 is within the range of reasonable reserves displayed in WTW's report supporting ASC's 2021 Statement of Actuarial Opinion for these exposures on a stand-alone basis. While it is important to note that the range projected by the ASC Appointed Actuary for the Hanover ECRA exposures was not prepared for this specific purpose, this provides further support that the recorded reserve for these liabilities is within a reasonable range.

Additionally, I performed industry benchmarking using WTW's proprietary asbestos and environmental benchmarks. These benchmarks are developed for reinsurance entities with similar-sized asbestos and environmental liabilities and provide another reasonability check of the recorded reserve. Specifically, I have applied benchmark survival ratios, unpaid to case reserve ratios, and market share allocations to the payment and case reserve history in the Hanover portfolio to determine a range of benchmark scenarios, which also indicate the recorded reserve as of December 31, 2021 is within a reasonable range of benchmarks. I did not prepare an independent estimate of loss reserves as a part of my work.

The long-tailed nature of asbestos, environmental, and mass tort liabilities result in elevated levels of uncertainty in the estimation of unpaid claim amounts compared to other property and casualty lines of business due to multiple factors, such as the potential impact on development caused by judicial or legislative decisions, changes in medical conditions of claimants, and changes in social or economic conditions like increasing inflation. Additionally, the excess nature of ECRA coverage increases the uncertainty of these projections. Consequently, alternate assumptions resulting in differences in the unpaid reserve estimate may be reasonable, and assessing alternate assumptions is outside the scope of my work.

One common diagnostic used to assess the reasonability of asbestos and environmental reserves is the survival ratio implied by the recorded reserve and recent annual payments. Survival ratios are calculated by dividing the loss reserves by annual payments, and the ratio reflects how many years of payments the current level of reserves would last if the same amount were paid each year into the future. Because annual payments are expected to decrease over time rather than continue at a fixed level, the actual payments are expected to be made over a much longer time horizon than the survival ratio indicates.

I have included below a comparison of the survival ratios to my firm's estimate of US PC Industry survival ratios for asbestos and environmental liabilities as of December 31, 2021. I present ratios assuming an annual payment equal to the average payment made over the last three and last five years.

Survival Ratios Based on Average Annual Payments Made
Data as of December 31, 2021

Payment	Estimated Survival Ratios - Hanover			Estimated Survival Ratios - ASC			WTW Industry Survival Ratios	
Years	Asbestos	Environmental	All	Asbestos	Environmental	All	Asbestos	Environmental
2017-2021	22.4	15.0	22.7	21.0	14.1	21.3	13.5	10.3
2019-2021	29.4	17.0	29.4	27.6	15.9	27.6	13.6	9.7

As shown in the table above, the survival ratios indicated by both Hanover's and ASC's recorded reserve at December 31, 2021 are well above WTW's estimates of the industry survival ratios for these latent exposures. This indicates that the reserves recorded by both Hanover and ASC for these exposures exceed my estimate of what a hypothetical adequately reserved company with similar payment activity over the past three or five years would record. It is my understanding that NLIC will continue to record the reserves for these exposures using methodology consistent with ASC.

Impact of Transfer on Assets and Liabilities

A simplified balance sheet reflecting the financial condition of both Hanover and NLIC before and after the IBT is included below. These amounts reflect a summary of the 2021 statutory annual statement for Hanover and illustrate the hypothetical impact of this IBT on those financials were they to have taken place in 2021. This table is purely for illustrative purposes. The liabilities include all liabilities, including items in addition to loss and loss adjustment expense reserves, such as unearned premium reserves.

Simplified Balance Sheet
Evaluated at December 31, 2021
Data in $000s

	Hanover Before IBT	Hanover After IBT	Change
Admitted Assets	9,691,845	9,656,736	(35,109)
Total Liabilities	6,978,553	6,943,445	(35,109)
Policyholder Surplus	2,713,292	2,713,292	0

Because the transferring liabilities have been reinsured by ASC, the IBT's impact on the liabilities is offset by the impact on the reinsurance recoverable. Therefore, the IBT has no impact on Hanover's policyholder surplus. Also, as noted above, the magnitude of the IBT's impact on the assets and liabilities is immaterial to Hanover's overall assets and liabilities.

Recognizing that the proposed IBT will be effective in 2023, I have included a similar simplified balance sheet for NLIC as of December 31, 2023, using the pro forma financial statements provided by NLIC.

Simplified Balance Sheet
Evaluated at December 31, 2023
Data in $000s

	NLIC Before IBT	NLIC After IBT	Change
Admitted Assets	8,010	56,802	48,792
Total Liabilities	2,471	32,745	30,274
Policyholder Surplus	5,539	24,057	18,518

As shown in the table above, as a result of the IBT, NLIC expects to increase their liabilities as of December 31, 2023 by $30.2 million and their assets by $48.8 million, which would increase policyholder surplus by $18.5 million. This capitalization reflects an RBC ratio of approximately 330% of the Authorized Control Level threshold. RBC ratios are discussed further in the "Risk Based Capital" section below.

Impact of Transfer on Policyholders

One of the primary requirements of the IE is to assess whether the proposed IBT will adversely impact the security of policyholders in a material way. In my assessment, I have identified three different groups of policyholders that will be affected by the IBT of these liabilities between Hanover and NLIC.

1. **(Re)Insureds Remaining with Hanover**

   Hanover provides a variety of property and casualty (re)insurance, and the ECRA exposures being transferred through this IBT comprise a small amount of their total insurance exposure. Therefore, many policyholders currently with Hanover will remain with Hanover after the completion of this IBT.

2. **(Re)Insureds Transferring from Hanover to NLIC**

   The liabilities being transferred relate exclusively to reinsurance that Hanover provided through their participation in the ECRA pool in years 1948 through 1982. That is, the participants of the pool are insurance and reinsurance companies rather than individual claimants.

3. **Reinsureds with NLIC before the IBT**

   NLIC is an R&Q subsidiary created in 2019 to manage the runoff of legacy liabilities. Consequently, the policyholders existing with NLIC prior to the transfer of business from Hanover are similar in composition to the policyholders being transferred from Hanover. Specifically, the loss and LAE reserves recorded by NLIC at December 31, 2021 are primarily related to a similar IBT of ECRA exposure from Sentry Insurance a Mutual Company that was approved by the Oklahoma Insurance Commissioner on November 23, 2020.

Assessment of Policyholder Security

Because Hanover's ECRA loss and expense liabilities are 100% reinsured through ASC, the IBT from Hanover to NLIC and commutation of the ASC contract has no impact on Hanover's net loss and loss adjustment expense liabilities. Furthermore, given the minimal impact of the IBT on Hanover's total loss and loss adjustment expense liability or policyholder surplus, the IBT is extremely unlikely to have a significant impact on Hanover's ability to pay claims for the (re)insured policyholders remaining with Hanover. That is, because Hanover has $4.4 billion in total loss and LAE reserves and $2.7 billion in policyholder surplus at December 31, 2021, the $35.2 million in gross liabilities and $0 in net liabilities represented by these ECRA exposures is immaterial to Hanover's financial position. Therefore, my assessment of the impact of the IBT on policyholders is focused on the policyholders existing at NLIC prior to the IBT and the (re)insureds transferring from Hanover to NLIC.

To assess the impact of the IBT on policyholder security among these two groups, I evaluated the position of both sets of policyholders before and after the IBT. My approach involved the consideration of multiple measures of financial strength, including

- pro forma financial statements for NLIC,
- Risk Based Capital (RBC) metrics,
- NLIC Own-Risk Solvency Assessment (ORSA),
- scenario testing and
- stochastic assessment of capital supporting proposed IBT.

In the event that NLIC needs additional capital, its parent, R&Q, could provide capital contributions. The ORSA provided by NLIC indicates that R&Q Group intends to maintain the minimum required surplus in Oklahoma for NLIC, which is $5 million. However, since additional capital contributions are not guaranteed, we have not considered the impact of hypothetical additional contributions in our analysis.

I have not assessed the capital position of R&Q Group as part of this work and therefore I am not commenting on R&Q Group's ability to provide additional capital under future scenarios.

Pro Forma Financial Statement

In compliance with the requirements of the Act, I have reviewed the pro forma financial statements for NLIC for the three years following the proposed IBT. In preparing the pro forma financial statements, R&Q assumed that the loss and LAE reserves would runoff in accordance with the actuarial reserve study prepared for ASC, the company would earn an average investment return of 2.5% annually. The expected annual investment return is based on NLIC's planned investment portfolio. The actual investment return may differ from this planned rate, and as discussed later in the report, I have considered the impact of fluctuations in the investment return in my analysis.

I have included below the three-year pro forma statements, in addition to the actual financial statement data for the most recent two years.

Pro Forma Financial Statement
Base Scenario
Data in $000s

	NLIC Actual History		NLIC Pro Forma Projections - Base Scenario			
	2020	2021	2022	2023*	2024*	2025*
Bonds	307	303	7,612	54,802	53,596	52,400
Cash/Cash Equivalents	4,726	7,368	1,000	2,000	2,000	2,000
Other Admitted Assets	2	37	-	-	-	-
Admitted Assets	**5,034**	**7,708**	**8,612**	**56,802**	**55,596**	**54,400**
Loss Reserves	-	2,344	2,531	32,558	30,711	28,896
LAE Reserves	-	287	272	46	46	46
Other Liabilities	5	41	58	141	141	141
Liabilities	**5**	**2,673**	**2,861**	**32,745**	**30,898**	**29,083**
Capital & Surplus	**5,030**	**5,035**	**5,750**	**24,057**	**24,698**	**25,317**
Reserve to Surplus		**52%**	**49%**	**136%**	**125%**	**114%**

*The IBT is projected to first impact the NLIC balance sheet in 2023

After the IBT in 2023, NLIC is expecting a reserve to surplus ratio of approximately 136%, and based on their assumed 2.5% investment yield and the projected runoff of their liabilities, they expect that ratio to shrink to 114% by the end of 2025.

Risk Based Capital

In addition to reviewing the pro forma financial statements for NLIC, I have also reviewed the risk-based capital for NLIC. RBC is a framework adopted by the National Association of Insurance Commissioners to serve as a capital adequacy standard that reflects the specific risks of an insurance company, namely asset, underwriting, and credit risk. The RBC framework can help insurance regulators identify companies with elevated risk of financial insolvency by establishing a minimum level of capital that an insurer must hold based on its risk. It also proposes four corrective action levels that are triggered as the capital adequacy decreases relative to the minimum level of capital identified by the RBC calculation. As a company's capitalization level decreases, it will descend down the four action levels, with increasing regulatory action being triggered at each transition. The four levels, along with the capital required for a company to enter that level, are summarized below:

1. Company Action Level – 200% of the Authorized Control Level (ACL). This is the first level triggering regulatory response. At this level, the insurer is expected to work with the applicable Insurance Commissioner to identify issues causing capital stress and propose a plan to take corrective action to reduce risk, increase capital, or both.

2. Regulatory Action Level – 150% of the ACL. If the company's capitalization drops it to this level, the applicable Insurance Commissioner may conduct an examination in addition to imposing the requirements in the Company Action Level.

3. Authorized Control Level. This amount is determined based on applying the insurer's specific asset, insurance, interest rate, and business risk information into the RBC formula. If the insurer's capital falls to this level, the Commissioner may place the insurer under regulatory control.

4. Mandatory Control Level – 70% of the ACL. At this level, the Commissioner will place the insurer under regulatory control or supervise the run-off of existing liabilities.

While the above action levels provide regulators a framework to identify and intervene with insurers struggling with low levels of capitalization, the framework does not prescribe a target capital level that is required or appropriate. Most insurers have an RBC ratio that exceeds the Company Action Level.

While the RBC ratio is only one tool used to measure risk and capital, its measurement is standardized, which allows it to be compared across insurers. Historical RBC ratios for Hanover and NLIC as well as the planned ratios for NLIC are presented in the table below.

Comparison of RBC Ratios
Base Scenario
Data in $000s

	Hanover			NLIC Actuals		NLIC Projections - Base Scenario			
	2019	2020	2021	2020	2021	2022*	2023*	2024*	2025*
Total Adjusted Capital	2,462,245	2,580,246	2,710,672	5,030	5,035	5,750	24,057	24,698	25,317
Authorized Control Level	531,855	552,600	593,867	9	527	724	7,298	6,937	6,584
Capital to ACL Ratio	**463%**	**467%**	**456%**	**56628%**	**956%**	**794%**	**330%**	**356%**	**385%**
Company Action Level	1,063,711	1,105,200	1,187,733	18	1,054	1,448	14,597	13,875	13,168
Capital to CAL Ratio	**231%**	**233%**	**228%**	**28314%**	**478%**	**397%**	**165%**	**178%**	**192%**

As shown in the table above, the historical capital ratios for both companies as well as the planned ratios for NLIC comfortably exceed the Company Action Level threshold that triggers the first regulatory response. As of year-end 2021, Hanover's adjusted surplus exceeds the Company Action Level by 128%. Similarly, based on NLIC's projected year-end 2023 liabilities, their projected surplus exceeds the highest regulatory threshold by 65%.

NLIC also provided alternative pro forma projections that assumes the liabilities associated with this IBT need to be increased by 25% immediately ("Higher Scenario"). The resulting RBC calculations for that scenario are provided below.

Comparison of RBC Ratios
Alternative Scenarios
Data in $000s

	NLIC Projections - Higher Scenario			
	2022*	2023*	2024*	2025*
Total Adjusted Capital	5,750	18,033	18,592	19,125
Authorized Control Level	724	8,704	8,334	7,971
Capital to ACL Ratio	**794%**	**207%**	**223%**	**240%**
Company Action Level	1,448	17,407	16,668	15,942
Capital to CAL Ratio	**397%**	**104%**	**112%**	**120%**

Even in this scenario, where the company immediately recognizes a 25% increase to the liabilities associated with this IBT, they would still hold enough surplus to exceed the first regulatory action without needing any additional capital infusions.

While RBC is only one measure of capitalization, this comparison supports the conclusion that both companies are well capitalized and are expected to remain well capitalized after the proposed IBT.

NLIC ORSA

In support of this risk transfer, NLIC has completed an ORSA to analyze all reasonably foreseeable and relevant material risks that could have an impact on its ability to meet its policyholder obligations. The assessment reflects the company's own evaluation of their current and future risks. The National Association of Insurance Commissioners (NAIC) requires (re)insurers to conduct these assessments to anticipate potential capital needs over an appropriate planning horizon and evaluate the companies' ability to respond to foreseeable risks and scenarios over that time horizon. We have reviewed this report as a part of our evaluation of the impact of this IBT on NLIC's operations and the ensuing impact on NLIC's ability to meet policyholder obligations.

NLIC's ORSA report covers a four-year planning horizon ending in December 2025. In this report, NLIC noted that it is R&Q Group's intention to operate NLIC in accordance with R&Q Group's risk appetite and all applicable laws and regulations for insurance companies domiciled in Oklahoma for the benefit of their policyholders. Additionally, they note that R&Q Group intends to support NLIC to maintain appropriate levels of overall solvency ratios and the required levels of surplus on an ongoing basis, and should it be necessary, R&Q Group is prepared to take corrective action to maintain those levels and ratios.

After evaluating a spectrum of risk categories, encompassing insurance, credit, market, liquidity, operational, legal and regulatory, strategic, reputational, and emerging risks, NLIC concluded that most of the risks have been assessed as being predominantly low. They have an in-depth knowledge and understanding of the ECRA liabilities since R&Q Group has been managing the pool via ETMC for twelve years, and the ETMC claims team has extensive knowledge of this exposure. NLIC expects it will benefit from the same processes and procedures underpinning the management of run-off liabilities as applied to other companies under R&Q Group ownership.

In the ORSA report, NLIC applied a quantitative assessment using RBC, similar to what we performed above. They also applied a qualitative assessment by categorizing risks based on their likelihood and severity on an inherent and residual basis. The inherent basis is prior to implementing any mitigating controls and the residual basis reflects the risk after the application of mitigating controls. In this qualitative approach, NLIC identified the top ten risks to their organization and ranked them on a scale of 1-4 in terms of likelihood and 1-4 in terms of monetary impact. They then took the product of these two scores to get a total risk score ranging from 1-16 for each identified risk, with 16 being the most severe score. Only one of their risks scored above a 10 on the inherent category, and that was the "failure to price deals appropriately." They note that they have brought in expertise in the run-off space to price these deals and ranked the residual score of this risk much lower at a 6.

NLIC's ORSA indicates an understanding of their risk environment and applicable mitigating actions as well as a commitment to operating the company in a way that serves policyholder interests and follows applicable regulatory rules and regulations.

Stochastic testing

While the RBC ratios reviewed above indicate NLIC is well-capitalized under the expected runoff of the liabilities, these ratios are generic and designed to apply consistently across the entire insurance industry. Therefore, these ratios might not capture the unique aspects of a particular loss portfolio. Stochastic modeling of unpaid claims allows for an assessment of these portfolio-specific features on the capital adequacy and the resulting probability of impairment to policyholders. Therefore, I have also performed stochastic modeling and stress testing of key assumptions to determine how changes to investment returns, ultimate claim payment amounts, and loss inflation scenarios could impact the assessment of NLIC's capital adequacy. The purpose of the stochastic modeling is to evaluate the impact on policyholders if there is no further support from NLIC's parent, although NLIC is expected to have the ability to replenish capital through their parent's support in the event additional capital is needed. However, additional capital contributions are not contemplated in this testing since these contributions are not guaranteed. This modeling also excludes any explicit impact of regulatory intervention.

Specifically, I modeled projected cashflows associated with the run-off of the unpaid Hanover ECRA claims for NLIC to assess if there is a material risk that policyholder obligations would be unmet as a result of this IBT. The modeled cashflows project annual claim and expense payments over the 35 years for which these payments are expected to be made to run-off this exposure. The modeled claim payments are based on fitting a lognormal distribution to the claim scenarios provided in the WTW Accredited report as well as the scenarios resulting from the benchmarking work I performed. I have also incorporated loss inflation estimates by year through an Economic Scenario Generator and considered an average annual investment return of 2.50%.

I created one model that parameterized the claim distribution based on referring to the figures provided in WTW's 2021 Actuarial Opinion report for ASC and a second model parameterized based on applying industry benchmarks to Hanover's own data. Based on these models, I expect that the reserve recorded by Accredited at 12/31/2021 along with the surplus NLIC is proposing to inject to support the IBT would be sufficient to meet the transferred policyholder obligations in all but the most extreme of scenarios, which are outside the realm of reasonable expectations. When stress testing the sensitivity to the investment return by assuming NLIC's average investment return to be 0% per year for the entirety of the runoff, the loss reserve and surplus still adequately cover the modeled claim and expense payments in all but the most extreme scenarios.

The distributions selected to simulate loss scenarios are informed by our experience modeling asbestos and environmental liabilities and incorporate professional judgment. Additionally, these loss simulations are difficult to test in hindsight with empirical data. Furthermore, simulation results toward the tail of the distribution are highly volatile. Therefore, my interpretation of the model results is based on judgment without quantifying a specific percentile criterion for making my conclusion. Based on the model results, I believe that a scenario causing both extreme adverse loss development and suppressed long-term investment returns is unlikely. In the great majority of the modeled scenarios, NLIC's proposed capitalization would be sufficient to runoff the liabilities associated with this proposed IBT without additional capital infusions. However, in the evaluation of certain stress scenarios, surplus would fall to levels that would likely trigger regulatory intervention under the RBC framework. As discussed in the NLIC ORSA report, R&Q Group does intend to maintain the minimum required surplus of $5 million in Oklahoma for NLIC. Although as noted above, this modeling does not account for mitigating actions, I would expect action from R&Q Group and/or the Commissioner for outcomes in which regulatory thresholds are triggered in order to mitigate risk on behalf of the policyholders and claimants. Therefore, policyholder security is likely to be higher than implied by the extreme scenarios highlighted in the stress modeling.

Based on the above review of the pro forma scenario testing, RBC ratios, the ORSA documents, and the stochastic testing, I have concluded that the proposed transaction will not adversely impact the security of the policyholders in a material way.

Impact of Transfer on Policy Administration and Corporate Governance

The pool members appointed ETMC, the ECRA pool manager, to handle claims and reinsurance settlements. ETMC provides billing statements and outstanding case reserve and incurred but not reported (IBNR) reserve reports to the pool members at intervals agreed to by ETMC and the ECRA member. These documents containing the data for Hanover's activity under its ECRA participation are distributed to Hanover and ASC quarterly. Since the 2021 reinsurance agreement between ASC and Hanover, ASC has paid billing statements related to the transferring liabilities. After the IBT, claims handling and billing will continue to be managed by ETMC, but NLIC will receive the ETMC monthly reporting documents and remit payments for invoices, as NLIC will have 'stepped into the shoes' of Hanover. Because NLIC and ASC have common operational functions within the R&Q Group, there will be no impact to policy administration or claims handling practices for billing statements and reserve reports provided by ETMC.

There will be no impact to policy administration or claims handling practices for the claims submitted by the transferring reinsureds to ECRA and its manager, ETMC, as a result of the IBT. I have reviewed NLIC's corporate governance structure which follows the system of governance established for the R&Q Group. NLIC will be governed by a Board of Directors. The NLIC Board will designate the formation of an Audit Committee at an appropriate point prior to the transaction. NLIC may also have an Underwriting

Committee, depending on the flow of business to NLIC. Otherwise, underwriting supervision will be provided by the R&Q Group. All operational functions including claims, reinsurance, finance, actuarial, information technology, human resources, internal audit, risk management (ERM), legal and corporate secretarial will be performed by R&Q Group resources. At all times the NLIC Board retains oversight and responsibility of all matters relevant to NLIC.

NLIC management benefits from R&Q Group's knowledge of ECRA through its ownership of ETMC since 2010. R&Q Group management has had oversight of the Hanover ECRA liabilities since the reinsurance contract between Hanover and ASC was executed in December 2021. I am satisfied that NLIC has proper board and management oversight and expertise to manage the transferring business after the IBT.

Reinsurance

The only reinsurance applicable to the transferring ECRA liability, issued by the NLIC affiliate ASC, will be commuted immediately upon completion of the IBT. There are no Guaranty Associations or State Insurance Funds that apply to the transferred business. Therefore, it is not necessary for me to consider the impact on other entities beyond Hanover and NLIC.

Priority of Claims

If the IBT is approved, in the unlikely event that capital falls to regulatory control levels, claims by the transferring reinsureds would have highest priority as NLIC's only insurance liabilities. Whereas before the IBT, as reinsurance policyholders, the transferring reinsureds would stand behind Hanover's direct policyholders in precedence of collections for claims payments in the event of an insolvency.

Communication Plan

The Act requires that the Transferring Company inform the policyholders and other interested parties of the hearing set by the Court to consider the IBT as well as publishing the plan for the IBT. Notice must be provided to all policyholders of the Transferring Company unless otherwise approved by the Commissioner.

Hanover plans to notify interested parties of the planned IBT through a variety of communication methods:

- Direct communication to transferring reinsureds from calendar policy years 1948 through 1982, the years that Hanover assumed risk from the pool. Hanover's strategy is to provide notice, by United States mail, first class postage prepaid, to all current Cedants identified as already having a claim, or having the potential for a new claim, at the most recent address held for that Cedant. The form of communication will include sufficient information to allow Cedants to understand the impact, if any, of the Insurance Business Transfer and what to do if there are any objections to it.
- Direct communication to ASC, the NLIC affiliate providing 100% reinsurance of the transferring liabilities beginning in 2021 and through the effective date of the IBT.
- Hanover will also provide notice of the Plan to all State Insurance Regulators by first class mail, postage prepaid. None of the business which is the subject of the Plan has any impact on any Guaranty Fund or Guaranty Association. However, notice will be given to the Guaranty Funds or Associations in accordance with the statutory requirement.
- Public notice through advertising in the within 15 days after the IBT hearing date is set.
- Displaying details of the transfer plan and this report on a dedicated website.

Hanover will directly notify each of the 638 insurers ceding to ECRA during the years that Hanover participated in the pool. The ECRA pool has been in runoff since 1992 and many of these ceding companies are no longer active with the pool.

In addition to the direct notification of the transferring reinsureds a toll-free number, email address and a separate website detailing the Hanover IBT transaction will be set up.

As previously discussed, the transferring liability is immaterial to Hanover. Hanover's current and prior policyholders will be notified of the transaction through advertising of the IBT in the Manchester Union Leader, Hanover's state of domicile and primary focus of business.

I have reviewed Hanover's strategy for communication of the planned IBT and the court hearing to policyholders, the reinsurer, and insurance regulators. I believe that the communication plan is reasonable and appropriate for the various parties to be notified.

Section 6: Reliances and Limitations

Inherent Uncertainty

In my judgment, I have employed techniques and assumptions that are appropriate, and the estimates presented herein are reasonable, given the information currently available. However, it should be recognized that actual future results will vary from those projected. Projections of loss and LAE liabilities are subject to potentially large errors of estimation, since the ultimate disposition of claims incurred prior to the financial statement date, whether reported or not, is subject to the outcome of events that have not yet occurred. Examples of these events include jury decisions and the size of awards, court interpretations, changes in legislation, insurance regulations and the standards of liability, changes in the medical condition of claimants, public attitudes, and social/economic conditions such as inflation. It should therefore be expected that the actual emergence of losses and LAE will vary, perhaps materially, from the liabilities transferred. Thus, no assurance can be given that the actual loss and LAE liabilities will not ultimately differ materially from the estimates contained herein.

- A relatively high proportion of the unpaid loss arises from asbestos and pollution; estimation of these types of loss is particularly uncertain because of the changing environment surrounding such claims.
- Recent changes in general inflation, particularly in the cost of materials and labor costs related to property damage repairs, could have an impact on the run-off of reserves. The potential exists for longer term inflation pressure which could impact wage and medical costs, therefore impacting longer tailed lines such as general liability and workers compensation. Such inflation increases could also impact the run-off of the reserves for many accident years. I have provided explicit adjustments in my scenario testing to account for such potential impacts.
- The IBT subject business consists of liability lines, that contain asbestos and pollution liabilities, which are subject to social inflation, that is, increases in claim settlement amounts and jury awards for cases that exceed increases expected from economic inflation. While I have attempted to adjust the scenario testing for these higher levels of social inflation, the ultimate impact is extremely difficult to measure. In addition, changing societal viewpoints (such as the #metoo movement) can impact types of liability claims going forward. If social inflation ramps up further, it will likely cause adverse development in the estimates for certain liability classes.

The above uncertainties also apply to the measurement of reserve risk. Reserve risk is typically measured by assuming that the volatility observed historically is predictive of the potential future volatility.

The absence of other recognized uncertainties at this time does not imply that factors will not be identified in the future as having been a significant influence on my findings.

Run-off

We have not made any explicit adjustments to reflect the run-off status of the underlying business in our modeling procedures. It is possible that a more focused approach to managing this business for recently acquired portfolios could produce results going forward that are different than expected based on an extrapolation of historical experience. However, we would expect that such differences, should they materialize, would be favorable, therefore making the projected reserve risk capital factors selected herein potentially prudent.

Incorporation of Economic Scenario Generator

For the purposes of our stochastic modeling, we incorporated loss inflation estimates by year through an Economic Scenario Generator and considered an average annual investment return of 2.50%. Reliance on our ESG, while reasonable, adds additional uncertainty in to the projected cashflows.

Inflation

Furthermore, recent changes in general inflation, particularly in the cost of materials and labor costs related to property damage repairs, could have an impact on the run-off of reserves. It remains to be seen how much impact higher levels of inflation may have on the payment of future claims. However, the stochastic modeling and scenario testing performed in support of this review make considerations for reasonable adverse fluctuations in claim emergence that could be caused by changes in the litigation or economic environment.

COVID-19

COVID-19 is a continually developing issue which is having significant effects on global economic activity and has created extensive social disruption. Longer term socio-economic implications and the impact on the projected liabilities remains [highly] uncertain. Key drivers of uncertainty include:

- Public, corporate and government responses to COVID-19, and the extent to which these responses have impacted global supply chains and economic conditions;
- The extent to which the spread of COVID-19, associated government actions and public behaviour may increase or reduce underlying insurance losses. For example, there are uncertainties regarding the duration of frequency reductions observed in certain lines as a result of social distancing;
- Policy terms and conditions and the extent to which coverage is available for losses identified as being related to COVID-19;
- The aggregation of COVID-19 related losses for outwards reinsurance purposes;
- The impact of restrictions arising from the virus on claim incidence, reporting, investigation, and the potential for reporting delays due to operational constraints affecting claims reporting, handling and settlement that may not fully manifest for some time dependent on the post-pandemic reversion to normalized levels of business activity in the affected markets;
- The impact of slowdowns in the tort system on the timing and recognition of losses on liability claims;
- Changes in behaviors of claimants and plaintiffs' attorneys due to economic conditions;
- Long term health impacts of survivors of severe cases of COVID-19, and health impacts on other claimants due to temporary changes in access to ongoing medical care;
- The effectiveness, duration, and timing of containment measures in reducing future infection and fatality rates of the virus, the speed and effectiveness of vaccines or treatments and the ability of health systems to cope with potentially large numbers of individuals simultaneously requiring treatment; and

- The impact on assets: my analysis makes no explicit allowance for the expected effects of COVID-19 on assets

In my opinion, I have applied methods and approaches which are proportionate in the context of the data and information available to me and my understanding of the exposures. The approaches used could be refined further, but I consider that the scale and underlying uncertainty of the liabilities means that the additional insight from such work would be of limited marginal value because of the uncertain future effect of the pandemic.

Data Reliance

Throughout this analysis, I have relied on historical data and other quantitative and qualitative information supplied by OID and the companies, both in writing and discussions, and described in the *Data and Information* section. I have not independently audited or verified this information; however, I have reviewed it for general reasonableness, internal consistency, and consistency with my knowledge of the insurance industry. My analysis inherently assumes that the information is complete and accurate, and that I have been provided with all information relevant to the analysis of OID the Companies' ultimate losses and LAE. The accuracy of my findings is dependent upon the accuracy and completeness of the underlying data; therefore, any material discrepancies discovered in this data should be reported to us and this report amended accordingly, if warranted.

Extraordinary Future Emergence

I have not anticipated any extraordinary changes to the legal, social, or economic environment, or to the interpretation of policy language, that might affect the cost, frequency, or future reporting of claims. In addition, my estimates make no provision for potential future claims arising from loss causes not substantially recognized in the historical data (such as new types of mass torts or latent injuries, pandemic events, terrorist acts, etc.) except insofar as claims of these types are included incidentally in the reported claims and are implicitly reflected.

No Evaluation of the NLIC's Assets

I have not examined the assets underlying NLIC 's loss reserves and we have formed no opinion as to the validity, quality, or value of these assets. I have assumed throughout the analysis that NLIC's loss reserves are backed by valid assets with suitably scheduled maturities and/or adequate liquidity to meet cash flow requirements.

Section 7: Data and Information

The companies have provided the following data and information for use in this analysis:

The Companies' Financials

- Hanover Annual Statements from Year-End 2019, 2020, and 2021
- Accredited Surety and Casualty Company's Quarterly Statement as of September 30, 2021 and 2021 Annual Statement
- R&Q Group System of Governance from 2020
- R&Q's Corporate Structure Diagram as of March 2022
- NLIC's Summary of Systems, Governance and Controls Processes
- NLIC Bylaws
- NLIC Certificate of Incorporation in Oklahoma

Transfer Details

- IBT Impact on Policy Administration and Claims Handling Assessment of Changes in Regulatory Requirements from New Hampshire to Oklahoma Confirmation of Transaction Sponsor
- IBT Draft Communications Plan and Policyholders Notice

Reserve Support

- ASC ECRA Payment History Net of Commutations
- ECRA Actuarial Reports from Milliman as of 12/31/2015 and 8/31/2019
- ASC Assumed, Ceded, and Net Position of Hanover's Portfolio as of 6/30/2021, 9/30/2021, and 12/31/2021
- Hanover's recorded assumed, ceded, and net position for the subject liabilities as of 6/30/2021, 9/30/21, and 12/31/2021
- ASC Actuarial Reports from Willis Towers Watson as of 12/31/2021
- ECRA Year-end Reporting Documents from ETMC for Hanover containing case reserves at year-end and loss payments made throughout the year for each of 2012 - 2021

Capital Support

- National Legacy Insurance Company Risk and Capital Assessment (ORSA)
- NLIC's Investment Strategy
- NLIC Pro Forma Financial Projections for 2021 through 2025
- Hanover provided research and discussion of RBC ratio statistics for mutual companies compared to the P&C industry as a whole, based on 12/31/21 annual statement data.

Insurance Industry Data and Information

- A&E benchmarking information based on A.M. Best data as of December 31, 2021, compiled by WTW.

Appendix A: Terminology

Case Reserves: The estimate of unpaid loss (or loss and DCC) amounts established by the claim department for unpaid claims that have been reported to the OID. Case reserves are established on an individual claim basis.

IBNR: Loss and/or DCC for claims Incurred But Not Reported. In this report, I have used the term in its broader, more general sense, to represent development on outstanding case reserves (also referred to as supplemental or IBNER – Incurred But Not Enough Reported) and unreported claims (also referred to as "pure" IBNR or IBNYR – Incurred But Not Yet Reported).

IBT: Insurance Business Transfer.

IE: Independent Expert assigned to review the proposed Insurance Business Transfer by the Oklahoma Insurance Department.

Incurred Loss: The total of Reported Loss and IBNR.

Earned Premium: The pro rata portion of written premium that represents the earned portion of the insurance contract as of a given point in time.

ECRA: Excess Casualty Reinsurance Association of America.

Exposure: The units in which the insurer's exposure to loss are measured.

Frequency: Claims per unit of exposure.

Loss Adjustment Expense (LAE): The term LAE includes both allocated and unallocated loss adjustment expense. See definition of unallocated loss adjustment expense below.

Loss Development Factors: Factors used to project losses and/or DCC to their ultimate value. These factors adjust actual losses to include IBNR and case reserve adequacy, or total unpaid amounts, to produce an estimate of total or ultimate loss (and/or DCC).

Loss Reserves: A liability item on the insurance company balance sheet to provide for unpaid claims. It consists of two components – case reserves and IBNR reserves.

Paid Loss: The amount of money that has been paid by an insurance company on behalf of insureds to cover the insureds' claims.

Reported Loss: The total of paid loss and case reserves for known claims.

Severity: Average loss per claim.

Trend Factors: Factors used to adjust the past loss experience to the cost levels of the period being considered. Trend factors include the effects of inflation and may also include adjustment for anticipated changes in laws, technology and other factors which may be expected to affect loss frequency or severity.

Unallocated Loss Adjustment Expense (ULAE): Those loss adjustment expenses not included within ALAE (e.g., fees of adjusters, attorney fees incurred in the determination of coverage, etc.).