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October 10, 2023

Ms. Vanessa Countryman  
 Secretary  
 U.S. Securities and Exchange Commission  
 100 F Street, NE  
 Washington, DC 20549-1090  
 Via Email to [rule-comments@sec.gov](mailto:rule-comments@sec.gov) File Number S7-12-23

Re: Release No. 34-97990; File No. S7-12-23 Conflicts of Interest Associated with the Use of Predictive Data Analytics by Broker-Dealers and Investment Advisers

Dear Ms. Countryman:

Guardrail Technologies Inc. (“Guardrail”) is pleased to submit this letter in response to the request of the U.S. Securities and Exchange Commission (“SEC” or “Commission”) for comments to the release titled “Conflicts of Interest Associated with the Use of Predictive Data Analytics by Broker-Dealers and Investment Advisers” (the “Release”). Guardrail is a for-profit corporation headquartered in the U.S. that is working to foster a future where artificial intelligence (“AI”), data, and technology are harnessed for the collective benefit of society, guided by strong ethical principles, fairness, and a deep sense of social responsibility. Founded in 2018, we are committed to shaping a future where AI serves as a force for good, empowering individuals, organizations, and communities worldwide. Guardrail is a provider of solutions to de-risk the use of AI and other cutting-edge technology. Currently, our primary focus is on three product lines, which are (i) consulting - including audits, assessments, feasibility studies and improvement roadmaps for organizations looking to implement or update their AI use and mitigate risk exposure, (ii) a software solution to protect users’ privacy by concealing private information during video conferencing, and (iii) a software suite implementing guardrails for the use of generative AI. Given our background and focus, we will not cover every aspect of the Release (e.g., its legality or consistency with or departure from existing regulatory frameworks) or attempt to answer most of the questions presented by the SEC. However, we believe that we may view these regulations from a different lens than many of the other comment letters you are likely to receive from investment advisers, members of the investing public, law firms and financial industry trade groups.

As a preliminary matter, we note that the Release (p. 53977)<sup>1</sup> states:

Firms that use more advanced covered technologies may need to take additional steps to evaluate technology adequately and identify associated conflicts adequately. For example, a firm might instruct firm personnel with sufficient knowledge of both the applicable programming language and the firm’s regulatory obligations to review the source code of the technology, review documentation regarding how the technology works, and review the data considered by the covered technology (as well as how it is weighted).<sup>2</sup>

Regardless of whether the proposed rules are enacted, Guardrail looks forward to putting together these types of teams when called upon by consulting clients. If the proposed rules are passed, our consulting division might conduct reviews of the type suggested by the SEC under the strict framework of these rules. If they are not enacted, then we still intend to assist investment advisers and broker-dealers to meet their existing obligations (and pursue best practices) in this area. In this letter, we refer to this type of multidisciplinary team as a “Review Team.” Our comments below focus on two categories of concern that we have about the proposed rules. First, as explained below, we believe that the proposed rules are both too broad and simultaneously too narrow. Second, from the standpoint of a Review Team, we focus on the difficulties that the team would face when confronting the language used in and requirements of the proposed rules.

Too broad yet too narrow:

The potential harms to society, the investing public and markets in general from AI range from garden variety to existential (or “X”). The possibility of X-risk has been highlighted in countless news stories and academic papers, and also by media personalities such as Elon Musk.<sup>3</sup> We view the harms that the Release aims to prevent (for example, as noted in the Release, “trading unnecessarily, allowing the firm to collect extra fees or payments from the additional trading activity (e.g., through increased commissions or payment for order flow) or investing in riskier positions that are more profitable to the firm”) as being more garden variety and less existential. Therefore, we believe that the SEC should think bigger and engage in broader discussions when trying to address the potential harms associated with AI and other predictive data analytics. This would include hearings, workshops and roundtables with industry players and members of the public. We are not suggesting that the currently proposed rules be made broader, just that the discussion takes place on a wider scale and include an analysis of the biggest potential harms, rather than impose prescriptive (and complex) rules to combat lower-risk items. Predicting and regulating the highest level risks in the area of AI is not an easy task and governing bodies, from the U.S. Congress to the U.N., are all trying to get their heads around AI and other new technologies that have the potential to create both astounding benefits to society and existential risks. The Release and its proposed rules seem rather small when one looks at the big picture, especially in light of the expected costs of putting together internal Review Teams or outsourcing the role to consultants. As noted above, the Release and its associated rules are also too broad, in

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<sup>1</sup> Page references are to the Federal Register.

<sup>2</sup> Footnotes omitted.

<sup>3</sup> <https://thehill.com/policy/technology/4008144-musk-theres-a-chance-ai-goes-wrong-and-destroys-humanity/>

the sense that we believe the language in the rules is not narrowly tailored to address the harms that the SEC likely wants to address. In fact, one other commenter calls one of the basic definitions used in the Release to be “without discernable limits.”<sup>4</sup> This vague and overbroad language will likely lead to the unintended consequences in the form of substantial waste and expense.

Text of proposed rules presents headaches for Review Teams:

We believe that the text of the rules will be very difficult for investment advisers, broker-dealers and their respective Review Teams to understand and implement. Below, we list some of the more significant causes for concern in the defined terms:

- “Covered technology” (p. 54023) (meaning analytical, technological, or computational function, algorithm, model, correlation matrix, or similar method or process that optimizes for, predicts, guides, forecasts, or directs investment–related behaviors or outcomes) is a vague and overly broad term. According to the Release, “[t]he proposed definition is designed to capture PDA-like technologies, such as AI, machine learning, or deep learning algorithms, neural networks, NLP, or large language models (including generative pretrained transformers), as well as other technologies that make use of historical or real-time data, lookup tables, or correlation matrices among others.” (p. 53972)) “PDA-like technologies” is itself a term that lacks discernable limits. Putting aside the word “like,” which potentially expands the definition exponentially, the Release defines “PDA” as predictive data analytics. Experts can disagree as to the boundaries of what constitutes PDA and we are sure that experts can disagree even more as to what is a “PDA-like technology.” To illustrate this lack of clarity, we note that AI is just one field within PDA and Footnote 9 (p. 53961) presents a lengthy, but still incomplete, description of AI. As AI is incorporated into our everyday objects and processes, the list of what is PDA-like is bound to grow to great lengths. We believe that it would be difficult for a Review Team to establish the boundaries of “covered technologies,” resulting in a waste of time and resources, as well as risks of non-compliance.
- “Investor interaction” (p. 54023) (i.e., engaging or communicating with an investor, including by exercising discretion with respect to an investor’s account; providing information to an investor; or soliciting an investor; except that the term does not apply to interactions solely for purposes of meeting legal or regulatory obligations or providing clerical, ministerial, or general administrative support) is also overbroad and vague. One needs to consider every iteration of client (or investor) relationship, service, and communication. People within these firms (as well as automated systems) have a broad spectrum of interactions with other people (i.e., their clients and other persons defined as investors). These personnel convey a variety of data from a variety of sources when having these interactions. A Review

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<sup>4</sup> See the comment letter dated September 12, 2023 from Financial Technology Association and additional industry groups at <https://www.sec.gov/comments/s7-12-23/s71223-258279-605062.pdf>

Team would need to learn about and dissect these interactions, which happen in real-time and evolve over time.

- “Conflicts of interest” (p. 54023) (arising when one uses a covered technology that takes into consideration the interests of the investment adviser or broker-dealer or their personnel) is similarly vague and overbroad. The definition is likely to pull in less material conflicts, which a Review Team might overlook at the investment adviser’s or broker-dealer’s peril. One can imagine that there are explicit conflicts of interest (e.g., the investor’s account trades more for no other reason than an affiliate collecting a commission) vs. inherent or indirect conflicts of interest (e.g., higher investment returns result in larger fees, incentivizing investment advisers to take on risk to achieve greater returns). One may believe that the second case would be outside of the definition, but will the SEC and its enforcement teams limit their scrutiny only to the most direct conflicts and not drill down through multiple layers of motivation and effects?
- The proposed rules do not just use these problematic definitions, they also combine these vague definitions, such that the lack of certainty compounds. For example, the proposed rule that would be set out in Section 275.211(h)(2)–4 (p. 54024) states in part as follows: the Investment Adviser must “Evaluate any use or reasonably foreseeable potential use of a **covered technology** by the investment adviser, or a natural person who is a person associated with the investment adviser, in any **investor interaction** to identify any **conflict of interest** associated with that use or potential use (including by testing each such covered technology prior to its implementation or material modification, and periodically thereafter, to determine whether the use of such **covered technology** is associated with a **conflict of interest**)”.<sup>5</sup> As one can see, all three of the definitions that we thought lacked clarity are used in the same section/sentence fragment. Members of Review Teams would need to spend a great deal of time studying these definitions since the rules and what they seek to identify and remedy are unintuitive (i.e., they will likely not know it when they see it, even with some training). We will not expand upon the need to identify “reasonably foreseeable potential use,” which requires a Review Team to speculate and predict the future.

### Costs:

Currently, the field of AI, and predictive data analytics more generally, is exploding. New discoveries and new products based upon these discoveries are occurring at warp speed. Therefore, it is impossible to predict how much it will cost to implement the proposed rules. Compliance may involve the engagement of a diverse and highly skilled Review Team, either on a full-time or consulting basis. There may be technologies that are impossible for the Review Team to analyze, as a result of insufficient access or extraordinary complexity, and these technologies would presumably remain off-limits (since the conflicts cannot be identified and eliminated), potentially

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<sup>5</sup> Boldface added for emphasis.

harming both the SEC's registrants and their investors. Alternatively, these technologies may be off-limits only to those who do not have the resources to engage the most highly trained Review Teams, putting those organizations' investors at a disadvantage.

Summary:

For the reasons stated above, Guardrail believes that the proposed rules will be extremely difficult to properly comply with in practice and we encourage the SEC to withdraw the Release and focus on more severe risks associated with AI, including those that might have seemed within the realm of science fiction only months ago. Guardrail's team will remain available to the Commission if we can be of assistance as the Release and other regulatory efforts in this area are further considered.

Sincerely,

Guardrail Technologies Inc.

By: /s/ Shawna Hoffman

Name: Shawna Hoffman

Title: President