OCC THE FOUNDATION FOR SECURE MARKETS

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Committee on Payments and Market Infrastructures
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Board of the International Organization of Securities Commissions
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VIA EMAIL

Re: CPMI-IOSCO Discussion Paper on Central Counterparty Practices to Address Non-default Losses

The Options Clearing Corporation (OCC) appreciates the opportunity to comment on the Committee on Payments and Market Infrastructures and the International Organization of Securities Commissions (CPMI-IOSCO) Discussion Paper on Central Counterparty Practices to address Non-default Losses (Discussion Paper). Preparing for and addressing non-default losses (NDLs) is an important risk management function of a central counterparty (CCP) and OCC appreciates the ongoing work of international policymakers and standard setting bodies to promote sharing effective NDL practices. Sharing NDL practices, allows for CCPs to learn from each other and is important for ensuring that all CCPs have the proper risk management frameworks in place to fulfill their role of promoting stability in the broader financial system. OCC has contributed to this effort previously by responding to the CPMI-IOSCO Survey on NDLs in January 2021, participating in CPMI-IOSCO workshops on NDLs in July 2021 and September 2022, and sharing with other CCPs bi-laterally and through trade associations. Furthermore, we share our NDL practices with clearing members through OCC's Board-level Risk Committee, Financial Risk Advisory Council (FRAC), and Operations Roundtable

General Comments

We believe that the *Principles for Financial Market Infrastructure* (PFMIs) provide a robust framework for CCP management of NDLs and do not believe that further guidance or standards for CCPs' addressing NDLs are necessary. As stated in Principle 3 of the PFMIs, a CCP "should have risk-management policies, procedures, and systems that enable it to identify, measure, monitor, and manage the range risks that arise in or are borne by the CCP," which include NDL-related risks. The PFMIs' principles- and outcomes-based approach allows CCPs to individually tailor their risk management practices, including with respect to NDLs, in a way that is appropriate for the particular risks they face. Furthermore, OCC and other CCPs are also sharing their NDL practices both bi-laterally, multi-laterally, and though trade associations. We believe it is important to continue to share NDL approaches among CCPs, which can consider these approaches and adopt, adapt or not follow them based on the specific risks that they each face.

The Discussion Paper rightly observes that today CCPs already consider a range of NDL scenarios that may arise relating to general business risk, operational risk, investment risk, custody risk and legal risk, but that the NDL scenarios (and subsequent quantification of losses) must reflect the unique risks that a given CCP must manage. The latter point is a fundamental one, as each CCP faces unique NDL-related risks that are a reflection of its individual structure, market, products cleared, and operational infrastructure.

The Discussion Paper highlights the diversity of practices that CCPs employ for identifying NDL scenarios, quantifying potential NDLs, and addressing NDLs, in the unlikely event they occur. The Discussion Paper also recognizes that that the assumptions and scenarios CCPs use to quantify potential NDLs are typically informed by expert judgement given the challenges of modelling losses stemming from low probability, high-impact events with limited historical data. We believe it is exactly the diverse nature of these practices and the need for CCPs to use expert judgement to compensate for the lack of historical data, which allow a CCP to effectively manage their unique risks. For this reason, we do not agree with efforts to issue a prescriptive set of scenarios and requirements for NDLs, which are themselves diverse in nature (ranging from minor system outages to major cyber-attacks). We believe such efforts could actually undermine risk management practices instead of strengthening them by making risk management less efficient and forcing CCPs to adopt a more formulaic approach rather than current approaches to NDLs, which are tailored and focused. Moreover, it is not possible for policy makers and standard setters to identify all of the NDL-related risks to which CCPs might be subject.

Ultimately, we believe a tailored approach based on the PFMI principles continues to be the best approach for enabling CCPs to effectively identify the types of NDLs they face and to put in place sufficient resources and effective practices to address such NDLs. The details as to what *specific* types of resources and practices CCPs use, however, will vary across CCPs, given their diverse nature.

About OCC

OCC, founded in 1973, is the world's largest equity derivatives clearing organization. OCC operates under the jurisdiction of both the Securities and Exchange Commission (SEC) and the Commodity Future Trading Commissions (CFTC). As a registered clearing agency under SEC jurisdiction, OCC clears transactions for exchange- listed options. As a registered derivatives clearing organization (DCO) under CFTC jurisdiction, OCC clears transactions in futures and options on futures. OCC also provides central counterparty (CCP) clearing and settlement services for securities lending transactions. In addition, OCC has been designated by the Financial Stability Oversight Council as a systemically important financial market utility (SIFMU) under Title VIII of the Dodd- Frank Wall Street Reform and Consumer Protection Act (Dodd-Frank Act). As a SIFMU, OCC is also subject to oversight by the Board of Governors of the Federal Reserve System. OCC operates as a market utility.

Response to specific questions

We have responded below to select questions from the Discussion Paper.

Overarching questions

1. Are there areas in the context of CCP NDLs where further guidance under the PFMI might be helpful? If so, what are the potential areas where further guidance might be most helpful? We believe that the PFMIs, as noted in the Discussion Paper, are currently sufficient to guide CCP management of NDLs. The PFMIs require CCPs to properly manage their risks, including NDL risks, and are both principles-based and outcomes-based. Given the breadth and depth of events that could precipitate an NDL, this principles-based approach allows CCPs to tailor their risk management practices and resources to their unique risks. While we do not think that further guidance is necessary at this time, we do believe it is and will continue to be helpful for CCPs to share their NDL practices with each other and market participants to ensure that CCPs are able incorporate effective practices in their NDL plans and that these plans mature over time.

2. Are there any additional points of consideration or practices, in addition to those mentioned in this discussion paper or in the PFMI and existing guidance, that would help CCPs effectively and comprehensively address losses from non-default events? Are there areas that require additional clarity from authorities? If so, what are they? As noted above, we do not believe there are any additional practices that CCPs as a whole need to take into consideration. There are, however, existing practices being implemented by some CCPs that have been shared and have the potential to help all CCPs to address NDLs, implement effective practices, and continue to evolve their programs. For this reason, we support the continued sharing of NDL practices, which OCC does bilaterally, multi-laterally, and through industry groups such as CCP12 and WFE.

Identifying NDL scenarios, quantifying NDLs and assessing the sufficiency of resources (Section 2)

5. How can a CCP identify potential NDL scenarios comprehensively as well as with an appropriate degree of granularity? There are a number of methodologies that CCPs currently employ to identify potential

NDL scenarios. For example, OCC follows guidance from Basel II standards on operational loss categorization. Annex 1 in https://www.bis.org/bcbs/qisoprisknote.pdf provides a list of Event-Type Categories, definitions, and examples. Subject matter experts at OCC determine which of these scenarios are likely to be relevant to OCC and its markets and could most negatively impact OCC. OCC then uses those scenarios in its Advanced Measurement Approach to determine the extent of potential NDL losses. The sharing among CCPs of the different ways in which they identify and develop relevant NDL scenarios, was instrumental in OCC's adopting its current approach.

6. Given that a CCP's efforts to prevent losses from non-default events may fail, what are effective approaches to prepare for and address resulting losses, in particular from low-probability, high-impact events? An effective approach to prepare for and address any loss event, particularly low-probability, high-impact events, is for CCPs to run regular scenario workshops. In accordance with its annual schedule, OCC conducts scenario workshops, where subject matter experts are given a scenario and are required to work through the scenario using the procedures and resources that OCC has in place, adjusting for the future as needed. OCC uses the results of these scenario analyses as one factor in sizing its target capital. OCC also regularly tests its credit facilities, which include a working capital line of credit and syndicated credit and repo facilities, by drawing on those facilities to verify that funding would be available in a timely manner.

7. Are approaches such as sensitivity analysis, scenario simulations, drills or stress-testing analysis useful for quantifying resource needs and assessing adequate NDL coverage? If so, what are potential obstacles hampering progress in this area and what could be possible avenues for reducing those obstacles? The approaches mentioned above can be useful for quantifying resource needs. The degree of usefulness, however, would depend on the characteristics of the individual CCP. As noted in the Discussion Paper, one of the primary challenges in using these approaches, however, is the lack of internal operational loss data for the CCP itself and the CCP industry as a whole. OCC compensates for the lack of data by using external industry loss data provided by ORX and IBM FIRST Risk Case Studies combined with analysis by internal subject matter experts to estimate potential losses. OCC and other CCPs have shared their approaches to addressing the issue of lack of data and other challenges related to using these approaches, which has been helpful. We have found, however, that there is no one-size-fits-all approach that can be prescribed for all CCPs.

8. Are there particular types of NDL scenarios that CCPs could consider to help assess potential resource needs and coverage for NDLs? (e.g., stressed business and operational risk scenarios extrapolated from past events, NDL scenarios exacerbated by wider macroeconomic stress, or other hypothetical NDL scenarios)? The type of scenarios listed in the above question could be useful for assessing the potential resource needs and coverage for NDLs. OCC uses the Advanced Measurement Approach, one of the three operational risk methodologies established under Basel II for financial institutions. OCC uses the Basel II operational risk event types to develop scenarios that could negatively impact the company. Internal subject matter experts are then asked for estimates of a 1-in-30-year level impact for these event types and external industry loss data is referenced. After the subject matter experts determine the 1-in-30-year loss amount, the events are combined and extrapolated out to a 1-in-1000-year event. The 1-in-1000-year amount is used as one (very conservative) input into determining OCC's capital needs. Again, OCC would like to emphasize that CCPs must have flexibility in determining the scenarios that are appropriate for their particular CCP, rather than being required to run a set of prescriptive scenarios that might not properly measure the CCP's specific NDL risks.

9. How and to what extent can the potential simultaneous occurrence of default and non-default-related events be taken into account? CCPs can prepare for the potential for simultaneous default and non-default events occurring through scenario analysis. OCC, for example, has developed scenarios in which both types of events occur at the same time. OCC then relies on its internal subject matter experts to develop the plans for recovery in response to these events.

10. What factors, in addition to those suggested in the PFMI, might a CCP helpfully consider when calculating the amount of liquid net assets funded by equity [LNAFBE] that is sufficient to implement its recovery

and orderly wind-down plans? The factors set forth in the PFMIs are comprehensive. As such, OCC does not believe there are any additional factors that need to be considered by all CCPs when calculating the amount of LNAFBE needed to support recovery and orderly wind-down plans. OCC's approach is to review the key elements of its cost structure that would remain in place as well as any additional costs that might be incurred as part of the recovery and wind-down process to estimate the cost of implementing its recovery and orderly wind-down plans. (OCC also estimates the length of time it would take to complete this process, which is discussed below). Some of the costs/savings OCC includes are: the salaries of the key staff that must be retained, the savings from a targeted reduction in staff, as well as the costs of the corresponding retention bonuses or severance packages. OCC also considers lines of business that may be terminated, additional requirements requested by members, a revision of OCC's investment activity, key agreements to maintain, and the costs related to the structuring of potential recovery and wind-down transactions, such as outside legal fees. How can a CCP effectively incorporate its general business risk profile and the length of time required to achieve recovery or orderly wind-down into this analysis? It is impossible for CCPs not to incorporate their general business risk profiles in estimating the LNAFBE necessary to support their recovery and orderly wind-down plans, given CCPs' diverse nature and differing levels of complexity, which would impact the costs involved in implementing recovery and orderly wind-down. Incorporating estimates of the time required to achieve recovery or orderly wind-down, is also fundamental, as it indicates how long these estimated costs must be borne. To obtain an estimate of this length of time, OCC reviews transactions for distressed companies in the financial sector and makes a conservative comparison of these firms' business to OCC's business profile.

11. Given the limited availability of historical data on severe NDL events, what do you consider the most important sources of information in developing plans to address NDLs, particularly for potential recovery situations (e.g., internal expertise, key stakeholders such as clearing participants and service providers, external market experts, relevant authorities, frameworks and practices in place for other types of financial institution)? OCC agrees that internal loss data and external data on operational losses at CCPs is very limited and that CCPs may need to supplement what is available with additional data. OCC compensates for this in two ways, by using external industry loss data provided by ORX and IBM FIRST Risk Case Studies and by obtaining input from internal subject matter experts to estimate the extent of potential losses.

12. Do you have any suggestions for how the clearing industry could leverage loss data from other industries or collaborate to share anonymised loss data? See response to Question 11 above.

13. What key measures can help to ensure that capital replenishment could be achieved in a timely and effective manner? Key measures that can help ensure that capital replenishment could be achieved in a timely and effective manner may include:
    - Clearly defining the capital replenishment tools/processes including triggers, responsibilities of the relevant parties, requirements, timing of the response, etc.
    - Detailing the use of the replenishment tool or process in the rulebook, particularly if the tool/process involves third parties. In OCC's case, the Operational Loss Fee, which it can charge clearing members if equity falls below a certain level as defined in its Capital Management Policy, is described in detail in OCC's rulebook. At a minimum, these requirements should be clearly defined in a binding agreement.
    - Setting out, if possible, the maximum amount that a CCP third party (i.e., clearing member) would be responsible for, so that the third party can incorporate this amount in their planning. In OCC's case the maximum Operational Loss Fee is included in its schedule of fees on OCC's public website.
    - Informing third parties of the consequences of not meeting their obligations when required. As a self-regulatory organization, OCC can adopt rules that are legally binding upon its members as a matter of federal law. OCC also has authority under its rules to discipline and suspend clearing members for non-compliance with OCC's Rules. In addition, OCC's rules are also an enforceable contract between OCC and its clearing members.
    - Routine testing of any processes related to obtaining the funding from third parties.

Does the clear definition and testing of processes to obtain backup funding from affiliates or external sources underpin the credibility of that funding? The clear definition and testing of processes to obtain backup funding from affiliates or external sources, as well as putting in place binding agreements with third parties to provide the funding, enhances confidence that that funding would be available, when needed. How do you assess the current availability of committed or legally binding funding arrangements? OCC assumes committed or legally binding funding arrangements to be available to satisfy capital replenishment, as needed, to address an NDL. To back up this assumption, OCC performs ongoing due diligence on the sources of its committed credit and repo facilities and regularly tests these facilities. With respect to the clearing members that would be responsible for paying its Operational Loss Fee, OCC maintains standards for clearing membership and continually monitors their financial condition to ensure that they can meet their financial obligations.

14. What role should insurance play for NDL, considering potential uncertainties about coverage, pay-out delays and performance risk? Are there certain types of NDL risk for which insurance may be a more appropriate loss-absorbing resource than for other types of NDL risk? Insurance may be an effective way for CCPs to cover certain risks related to NDLs, such as those resulting from employee fraud or a cyberattack. Due to the potential uncertainties (related to coverage, pay-out delays and performance risk noted above, and the lack of availability of insurance at a reasonable cost), however, CCPs are often unable to rely on insurance to cover potential NDLs that may lead to recovery and wind-down. For example, OCC does not rely on insurance to cover the significant losses in its stress scenario workshops and limits the use of insurance in its operational loss quantification process to 20% of total operational risk, regardless of OCC's actual coverage level.

15. What practices might improve CCPs' planning for an orderly wind-down necessitated by NDLs? CCPs have transparent recovery and orderly wind-down plans in place. OCC, for example, published a participants' guide to recovery and orderly wind-down on our web-site. OCC believes it is also important to have proper governance and testing of the recovery and wind-down process. OCC, for example, has in place a Recovery and Wind-down Working Group that develops and tests its responses to the recovery and wind-down scenarios.

Achieving operational effectiveness (Section 3)

16. Are there any additional notable practices that could promote the operational effectiveness of plans to address NDLs? As noted in the Discussion Paper, OCC believes it is important to set forth tools to address NDLs that involve clearing members in the CCP's rulebook (and in legal binding arrangements for other third parties) for legal enforceability and transparency reasons. In this regard, OCC sets out in Rule 1006 (c) that OCC may borrow and/or charge losses against its Clearing Fund for non-default losses arising from a settlement bank, custodian, or clearing organization failure. In addition, OCC details the requirements for clearing members with respect to its Operational Loss Fee in its rulebook. As a self-regulatory organization, OCC can adopt rules that are legally binding upon its members as a matter of federal law. In addition, OCC's rules are also an enforceable contract between OCC and its clearing members. OCC also has authority under its rules to discipline and suspend clearing members for non-compliance with OCC's rules.

    It is also important for a CCP to define and test how it will address NDLs. For operational resiliency scenarios (business as usual scenarios such as the temporary outage of a third-party vendor or OCC's clearing and risk systems), OCC has developed a playbook on how it would resolve each scenario to ensure operational effectiveness. For the more extreme recovery and wind-down scenarios, OCC establishes an annual schedule of scenario workshops and tabletop exercises under the governance of its Recovery and Wind-Down Working Group, to ensure operational readiness. At these scenario workshops/tabletop exercises, OCC implements these scenarios according to its defined procedures and with the available resources. If any issues are detected, OCC revises the relevant procedures, assumptions, tools, resources and/or OCC's Recovery and Orderly Wind-Down Plan, as needed. OCC's Crisis Management team, which supports OCC's Management Committee in deciding if non-default loss recovery tools need to be triggered, is also involved to ensure that OCC can mobilize resources to address NDLs in a timely and efficient manner.

17. What approaches might be helpful to ensure that relevant third parties (such as service and liquidity providers) fully understand and are prepared for their potential role in addressing NDLs? Like many CCPs, OCC has a dedicated department, Third-Party Risk Management (TPRM), focused on assessing and addressing third-party risks, including those related to third-party service providers. TPRM falls under Corporate Risk Management and oversees third party relationships as well as identifies, mitigates, and communicates the risks of conducting business with third parties. These third parties include custodian banks, exchanges, vendors and liquidity providers. TPRM works closely with the other business functions within OCC and individuals who manage a relationship with a third party.

    As noted above, for tools that involve any relevant third parties it is helpful to establish the third-party obligations in the CCP's rulebook and/or in binding agreements. OCC has in place contracts with each third-party service or liquidity provider that details the obligations of each party and includes service level agreements, which detail the service expected, metrics for measuring the service level, as well as remedies and penalties should the agreed upon level of service is not achieved.

    OCC can also access the Clearing Fund to cover certain specific NDLs, which are specified in its rulebook. To ensure that these third parties are prepared to fulfill their obligations, OCC regularly conducts test draws from the Clearing Fund and its committed credit and repo facilities to ensure that the funds would be available on a timely basis. OCC also reviews its insurance contract, which covers certain NDLs on at least an annual basis to ensure that OCC has proper coverage and legal protections in the event of an NDL.

18. What are the essential elements of appropriate due diligence vis-à-vis relevant third parties on which CCPs would expect to rely in an NDL event? In accordance with PFMI Principle 17 (Operational Risk) OCC, like other CCPs, has well-defined processes for conducting due diligence on critical third parties (i.e., service and liquidity providers, clearing members, etc.). OCC performs this due diligence (financial, operational, and qualifications) during onboarding and conducts ongoing monitoring to prepare for and mitigate potential risks to the CCP and the marketplace, including the risk of failure to perform or make available contractually-obligated services in an NDL event.

    For example, to ensure the capacity of clearing members and other third parties to meet their financial obligations with respect to certain NDLs, OCC monitors the financial conditions of these third parties on an ongoing basis and takes measures if there are any concerns with their ability to meet their obligations. OCC also conducts similar due diligence and monitors its service and liquidity providers and as noted above, does test draws of its Clearing Fund, bank credit and bank and non-bank repo facilities.

19. What are the key factors and constraints that impact the choice and order of different tools for the various types of NDL scenario? OCC's decision-making process with respect to the choice and order of tools is primarily based on the type of NDL and its severity. For example, the insurance carrier may reimburse OCC for certain kind of NDL events (e.g., employee fraud, a cyber-attack), and in certain limited cases, OCC can borrow against/charge losses to the Clearing Fund (see explanation above). For all other NDLs, OCC would first use the liquid net assets funded by equity (LNAFBE) over 110% of Target Capital. If equity falls below certain thresholds, unvested funds held in OCC's Executive Deferred Compensation Plan ("EDCP") would then be used. Should equity still remain below thresholds defined in OCC's Capital Management Policy, an Operational Loss Fee would be charged to Clearing Members for replenishment purposes.

Reviewing and testing plans for NDLs (Section 4)

21. Are there additional notable practices for reviewing and testing plans to address NDLs? CCPs should review and test their plans to address NDLs regularly. OCC reviews and tests its plans to address NDLs, at a minimum annually and more often if NDL risks change materially. As mentioned above, OCC develops an annual schedule for NDL scenario workshops and testing and conducts these workshops/tests throughout the year.

22. What challenges are there to achieving the goal of increasing the involvement of additional stakeholders in different stages of review and testing of plans to address NDLs? As do other CCPs, OCC provides public disclosure of its NDL framework through the existing PFMI Qualitative and Quantitative disclosures. OCC also discusses its NDL approach with stakeholders bilaterally or as part of its Board-level Risk Committee, and its risk working groups, the FRAC and/or Operations Roundtable. Subject to confidentiality and other concerns, we may also include third parties, (e.g., clearing members) in reviewing and testing plans to address NDLs that would trigger any clearing member obligation.

Providing effective governance, transparency and engagement with participants and authorities (Section 5)

24. Are there additional notable practices for providing effective governance, transparency and engagement with participants and authorities in the context of NDLs? As noted above, OCC believes that the PFMIs and related *Disclosure framework and assessment methodology* (December 2012)[1] establish comprehensive and appropriate principles for effective governance, transparency, and engagement with participants on NDLs.

    Principle 2 of the PFMIs is appropriate and sufficient with respect to **governance.** Principle 2 states that a CCP "should have documented governance arrangements that provide clear and direct lines of responsibility and accountability," including clearly defining the roles and responsibilities of a CCP's board (or equivalent) and management. PFMI Principle 2 further states that "[t]he board should establish a clear, documented risk-management framework that includes the FMI's risk-tolerance policy, assigns responsibilities and accountability for risk decisions, and addresses decision making in crises and emergencies." The PFMIs principles- and outcomes-based approach allows CCPs to adopt governance arrangements for NDLs that allow them to effectively address NDLs in the most appropriate manner for the risks they face, based on their structure, markets, and products cleared, among other things. The Discussion Paper highlights, for example, that CCPs, including OCC, typically set out specific approaches for addressing NDLs (in business-as-usual and recovery) and have in place governance arrangements that ensure that NDL plans and resources are reviewed and approved by senior management and the board. The Discussion Paper further notes that governance arrangements for NDLs are often defined in a CCP's rules or recovery plan, which is the case with OCC, and that some CCPs define the timing, procedures, and governance arrangements for using specific funding or loss allocation tools in their rules.

    With respect to **transparency,** CCPs, provide significant information on how they address NDLs through their qualitative PFMI disclosures, which are public. OCC also provides extensive disclosures on NDLs and their related risks through other public disclosures, including its rulebooks, rule filings, and its Participant Guide to Recovery and Wind-down, and through its Board-level Risk Committee, FRAC and Operational Roundtable.

    With respect to **engagement**, Principle 2 of the PFMIs states that a CCP's board should ensure that the CCP's "design, rules, overall strategy, and major decisions reflect appropriately the legitimate interests of its direct and indirect participants and other relevant stakeholders." In addition, the key

[1] https://www.bis.org/cpmi/publ/d106.pdf

considerations under Principle 2, a CCP's governance arrangements are expected to reflect the legitimate interests of market participants, which would include in the context of NDLs. There are a number of ways in which market participants can engage on matters, such as NDLs, that could have a material risk impact, including through commenting on draft rules and participating on risk committees and risk advisory groups, as well as bilateral engagement.

25. What are the most important elements of appropriate processes and governance arrangements for rule-based loss allocation to support clearing members in anticipating and preparing for potential exposures?
OCC believes that an effective practice is to detail the process and governance arrangements for rule-based allocations of NDLs in the CCPs' rulebooks, which are publicly available on their websites. This is the case at OCC, which defines the specific circumstances and terms under which a clearing member may be responsible for covering certain NDLs. This allows clearing members to anticipate and prepare to cover these potential exposures.

We thank the CPMI-IOSCO for the opportunity to provide comments on the *Discussion Paper on Central Counterparty Practices to address Non-Default Losses.* As we discussed above, OCC does not believe there is a need at this time for additional guidance or standards on how CCPs approach NDLs, as the PFMI's principles- and outcomes-based approach allows each CCP to tailor their NDL governance structure, scenarios, practices, and resources to address its specific risks. We do believe, however, that it is important for CCPs to continue to share their practices with other CCPs and market participants. This will ensure that all CCPs can develop a robust NDL management plan in accordance with the PFMIs and that these plans evolve over time.

If you have any questions, please do not hesitate to contact me at 312-322-6220 or jdavidson@theocc.com.

Sincerely,

John P. Davidson III

John P. Davidson

Chief Executive Officer