December 12, 2018
Via Electronic Submission

Ms. Ann Misback
Secretary
Board of Governors of the Federal Reserve System
20th Street and Constitution Avenue, N.W.
Washington, DC 20551


Dear Ms. Misback,

We appreciate the opportunity and respectfully submit our comments on potential actions the Federal Reserve could take to facilitate real time payments.

Advances in technology and changing end-user expectations have necessitated a change in our payment systems. End users have become accustomed to being able to perform tasks in real time using technology – text messaging, sending a picture, requesting a car, etc. Yet our payments systems settle on a deferred basis at different rates of speed, with limited messaging capabilities, and a lack transparency as the payment travels from sender to recipient. Real time payments with robust messaging have the potential to ensure our payment systems meet the needs of end users. We appreciate the Federal Reserve Bank’s efforts to bring the industry together over the past three years to advance the development of real time payments.

We ask the Board of Governors to give consideration to the viewpoints presented below as you complete your analysis and determine what action will be taken by the Federal Reserve.

The Federal Reserve as an Operator

We support the Federal Reserve acting as an operator of a faster payments system and believe this action could help current efforts underway by the private sector to create an infrastructure to facilitate real time payments. The Federal Reserve and private sector currently offer payment processing services for both check and ACH transactions, and this structure of public private sector payment services has fostered competition, resiliency, and ubiquity. The Federal Reserve being an operator of a faster payments solution would:

- Create competition on price and service that will benefit all participants;
- Increase the adoption of faster payment services with financial institutions that otherwise may decide not to utilize a private sector solution;
- Decrease the time to achieve end-user ubiquity through its existing connectivity to 11,000 banks and credit unions;
The Federal Reserve Bank has played a critical role in payments, serving as both a provider and a regulator of payment services. There are individuals, both inside and outside the Federal Reserve, that question the role of the Federal Reserve in the payments system. These individuals argue the Federal Reserve should stick to monetary policy and regulation, and leave payments processing to the private sector. The Federal Reserve as a provider of payment services has ensured financial institutions of all sizes have equal access to the payment systems, thereby fostering competition and innovation. At the same time, the Federal Reserve connects remote endpoints where the return on investment is challenging, and ensures payment systems are ubiquitous and reach as many end users as possible. In addition to these day to day operational benefits, the Federal Reserve Bank as central bank is in the unique position to be a backstop in the event of an emergency associated with the payments system. This was evident after 9/11 when funds were released into the banking system by the Federal Reserve to facilitate payments, as check collections were impacted by the events of the day. The events of 9/11 should put to rest the question as to whether or not the central bank should provide payment services.

**Interoperability**

If the Board decides to create a new faster settlement system, it must seek to be interoperable with comparable private sector solutions currently in the marketplace. This is a critical factor given financial institutions are in various stages of adoption and they need to know that investments made now will still be viable in the future.

Essential to this discussion is the faster payments solution provided by The Clearings House (TCH), who has done a good job advancing the industry to bring a Real Time Payments (RTP) solution to the market. Not only should interoperability with the TCH service be a priority, but consideration should also be given to the design and protocols of the TCH solution when creating the Federal Reserve system. The value of both systems will diminish if they do not allow transactions to move seamlessly back and forth. In the absence of interoperability, financial institutions will have no choice but to select one of these unfavorable options:

- Do not pursue the adoption of an existing solution because of possible obsolescence created by an incompatible system brought to the market by the Federal Reserve.
- Adopt the Federal Reserve service and incur the expense and inefficiency of operating two solutions, or more if other private sector solutions come to market.
- Do not offer the new solution which will result in customers unable to receive or send payments to users on the Federal Reserve service.

None of these options are acceptable and will slow down and disrupt the adoption of faster payments systems across the industry. If the Federal Reserve decides to provide a new payments service, a commitment to pursue interoperability with private sector solutions is a must.
**Liquidity Management Tool**

A Liquidity Management tool offered by the Federal Reserve would assist financial institutions as they manage funds designated for the settlement of real time payments, and should be available whether the transactions travel across the Federal Reserve service or a private sector solution. A strong argument can be made that the Federal Reserve is best suited to provide this service and this action could speed the adoption of faster payment systems across the industry.

The proposed liquidity management tool would accommodate 24x7x365 funds transfers from a financial institution’s master reserve account to a faster payments settlement account. We support this concept of separate settlement accounts as long as funds are treated as reserves, earn interest and satisfy reserve requirements. This will address the challenge financial institutions will face in determining the appropriate balance to maintain in a prefunded faster payments settlement account.

A liquidity management tool should be developed independent of any other Federal Reserve action and made available to other solutions in the market.

**Financial Institution Centric**

If the Board decides to create a new, faster settlement system, it must continue to keep the nation’s payments secure by restricting direct access solely to chartered financial institutions that are regularly examined and subject to capital reserve requirements. This long established policy and statute is a judicious policy which should be maintained.

The banking industry has effectively partnered with nonbanks to offer improved payment services and benefits to their customers. Nonbanks in turn provide services to help financial institutions offer more innovative online banking programs and customer centric payment applications. The service nonbanks cannot provide without a financial institution is interbank settlement of funds. This arrangement allows for virtually unlimited innovation built upon the trusted and reliable financial services clearing systems.

Consumer protection and settlement risk lie at the center of this discussion. Today, settlement risk associated with third parties that originate ACH transactions via a financial institution is mitigated since the originating financial institution takes full accountability for the validity of the transactions and for settlement on behalf of the third party. If unauthorized ACH transactions are originated, whether or not the third party funds these transactions, the financial institution is responsible for ensuring customers receive the funds they are due. This is possible because the financial institution is regulated, capitalized and regularly examined to warrant the financial institution is able to manage the risk of processing transactions on behalf of customers. If a third party ACH processor had direct access to the payment system and did not fund the transactions, there is no recourse for customers to recover funds they are owed.

In a RTGS environment, settlement risk would be substantially reduced since funds clear and settle simultaneously. However, attention must be given to ensure the risk of fraudulent and unauthorized transactions does not increase as a result of the speed with which funds can be moved out of an account. Regulated financial institutions meet stringent requirements such as GLBA, Reg E, and Reg Z that protect customer accounts from intrusions and unauthorized access, protect the privacy of personal account data,
and provide mechanisms for claims in the event of unauthorized payments. The introduction of a RTGS system does not reduce any of these risks.

The other benefit of a financial institution centric approach is the ability for the Federal Reserve to intervene in an emergency situation such as occurred post 9/11. After 9/11 the Federal Reserve was able to step in and provide liquidity and funding as checks were stuck on the ground throughout the United States. This was made much easier given all endpoints were insured depository institutions, subject to supervision and capital requirements associated with bank regulations. Given the significant role real time payments will play in the future, having the Federal Reserve Bank playing an integral role is in the nation’s best interest. The US dollar is the reserve currency around the world and the Federal Reserve’s backing of payment systems enhances the confidence the rest of the world has in our currency.

Providing unregulated nonbanks with access to the faster payments system would introduce an unacceptable level of risk to all participants and potentially create harmful downstream impact to the economy. Real time settlement could be systematically disrupted in the event of a bankruptcy by a major non-bank provider. Whereas resolution mechanisms exist to continue clearing payments in the event of a bank failure, a settlement account owned by a non-bank provider may become part of a bankruptcy estate and ultimately liquidated to the benefit of creditors. At a minimum, the accounts may be frozen until the bankruptcy court rules on the ability to continue settling payments. In the absence of governing controls and institutions working closely with regulators, it would be difficult to control the systematic implications that could arise. In an era of increasing cyber threats and data breaches at unregulated entities, we urge the Federal Reserve to keep the payment systems secure by respecting the current laws that allow access only to chartered financial institutions that are regularly examined and subject to capital reserve requirements.

The Monetary Control Act

To offer any new payment service, the Federal Reserve must meet three requirements set forth in The Monetary Control Act. There are differing opinions as to whether the actions presented in the Board’s proposal would meet these requirements. More details are necessary before the challenges of the Monetary Control Act can be resolved with certainty, however, the basic requirements are:

1. The service will provide a clear public benefit.
   - In our view, this threshold will be met due to the expected benefits of competition, better pricing and service.
   - Having two service providers will also increase the system's resiliency in case of a national emergency. The Federal Reserve as the central bank also has the unique capability to stand in and provide stability as they did post 9/11.
   - Given the Federal Reserve's efforts with the Faster Payments Task Force over the past 3 years, it is evident their approach will take into account the perspectives of all segments of the payment ecosystem – consumers, retailers, technology, businesses, financial institutions, etc.
   - The US dollar is the reserve currency of the world, and having the central bank of the United States part of the payment system is key.

2. The service should be one that other providers alone can’t be expected to provide with reasonable scope, effectiveness, and equity.
- The intervention into a relatively new private sector marketplace by the Federal Reserve may be argued to be premature by some. However the Federal Reserve is unique in that it has current relationships and connections with thousands of financial institutions, including some institutions that would be too small or remote to be considered viable clients for other operators. This reach is what creates ubiquity and is necessary if faster payments are to be available for all participants in the payments ecosystem.
- Rural and underserved areas of this country already have limited options for banking services to choose from. The Federal Reserve’s involvement will ensure customers in remote areas have access to faster payment services.
- In addition, there are benefits to having more than one service provider to ensure that they compete on scope, price and service.

3. Full recovery of costs over the long run.
- Meeting this could be a challenge because TCH’s Real Time Payment (RTP) product will be in place at the largest financial institutions in the country by the end of 2019, and many smaller financial institution are expected to join during that same time period. Given the large volume that TCH RTP will capture before a Federal Reserve solution goes live, meeting the cost recovery requirements will be challenging because the pool of transactions will be shrinking. It will be difficult to allocate the costs of a new system across a much smaller pool of transactions at a reasonable price to ensure cost recovery in the long run. However one could also argue the solution offered by the Federal Reserve, if superior, could acquire volume from TCH and therefore the head start afforded TCH would not impact the volume available for cost recovery purposes.
- One could also argue a large portion of ACH, and small wholesale wire volume could move over to the RTGS system, and therefore a larger denominator is available when calculating a cost recovery. We are seeing the limit for same day ACH transactions increase as use cases expand and operators become comfortable mitigating the risk. The same would be true of RTGS transactions.
- Volume could also shift if financial institutions become more comfortable with the “collateralization” of real time settlement through separate reserve accounts to mitigate interbank liability risk.
- It is also possible that it is too soon to determine if full recovery of costs can be determined based on the level of detail provided in the proposal. It is difficult to determine the attractiveness of the Board proposal without more detail.

**Specific Questions Asked by the Board**

1. Is RTGS the appropriate strategic foundation for interbank settlement of faster payments? Why or why not?

   Yes, RTGS is the preferred approach over Deferred Net Settlement (DNS) models that do not support end user expectations and allow risk to build within the system in the event of settlement failures.

   Given the advances in technology end users expect payments to work in real time. Today we can only provide the illusion that funds are moving in real time by making funds available to end users in real time, while financial institutions keep track of all the “IOUs” and settle funds one to three days later. The issue with this approach is that as volume grows and dollar limits are raised to accommodate more use cases, the interbank settlement liability will reach a level that creates undue risk for the industry.
RTGS will require uninterrupted availability of the service, high resiliency and greater emphasis on contingency arrangements, which lends weight to having more than one RTGS service provider. RTGS presents an actual improvement beyond what the existing infrastructure can provide.

2. Should the Reserve Banks develop a 24x7x365 RTGS settlement service? Why or why not?

Yes, as part of the Federal Reserve’s central mission, it has a fundamental responsibility to ensure there is a safe and robust infrastructure supporting the U.S. payment systems on which the private sector can develop innovative payment services that serve the broadest public interest. As stated in our previous comments, we believe this will create healthy competition, increase adoption and decrease the time to achieve nationwide ubiquity for faster payment systems.

3. If the Reserve Banks develop a 24x7x365 RTGS settlement service,

a. Will there be sufficient demand for faster payments in the United States in the next ten years to support the development of a 24x7x365 RTGS settlement service? What will be the sources of demand? What types of transactions are most likely to generate demand for faster payments?

Yes, there will be significant demand for faster payments in the next ten years, and this demand will increase as more financial institutions are able to deliver real time payment solutions to their customers.

There are many use cases across a multitude of different markets – P2P, B2B, B2P, rush bill pay, gig worker payroll, disbursements, etc. – and the industry cannot meet the expectations of a digital economy without real time settlement of payments. There will be continued pressure from consumers and businesses globally for a faster payment systems in the United States as real time settlement becomes more the norm in other countries, and businesses continue to expand into more global markets.

b. What adjustments would the financial services industry and its customers be required to make to operate in a 24x7x365 settlement environment? Are these adjustments incremental or substantial? What would be the time frame required to make these adjustments? Are the costs of adjustments and potential disruption outweighed by the benefits of creating a 24x7x365 RTGS settlement service? Why or why not?

Adjustments would be substantial to support a 24x7x365 settlement environment and would require an impact analysis across many departments. The following is not an exhaustive list of the systems and processes that will require adjustments, and more will emerge as details of the proposed service are better understood:

- customer facing applications
- core processing systems
- fraud and screening systems
- overdraft policies and processes
- dispute resolution and customer service
- reconciliation windows
- liquidity management
- AML and OFAC operations
- change management
It is not possible to provide a response regarding the timeline required or potential level of disruption. There would be significant cost, not unlike other investments in infrastructure – branches and call centers – to attract and retain customers. Given the consumer and business demand, if we don’t make the investment, someone else will and take our business.

c. What is the ideal timeline for implementing a 24x7x365 RTGS settlement service? Would any potential timeline be too late from an industry adoption perspective? Would Federal Reserve action in faster payment settlement hasten or inhibit financial services industry adoption of faster payment services? Please explain.

Given the goal of the Faster Payments Task Force was ubiquitous faster payments by 2020, which is unlikely, the timeline is now. The longer it takes the Board to decide what action to take, the more disruptive to the market. Some financial institutions will continue to wait on the promise of a Federal Reserve solution. If a 24x7x365 RTGS service will be built, this should be announced as quickly as possible, and appropriate resources dedicated to implementing a solution, interoperable with comparable private sector solutions, as soon as possible.

While the Federal Reserve as a provider of a RTGS settlement service may temporarily slow down adoption, if interoperable with other private sector solutions, it could in the long run speed up adoption. The Federal Reserve could utilize existing connections to financial institutions, and they would be another provider to onboarding financial institutions in the market. The experience of image enablement for check clearing is an instructive one, where private sector participants also offer services that compete with the Federal Reserve. While adoption was initially strong, it took incentives, and in the end standards, to move the industry to full adoption. The Federal Reserve may well need to play a similar catalyzing role with RTGS settlement services.

d. What adjustments (for example, accounting, operations, and agreements) would banks and bank customers be required to make under a seven-day accounting regime where Reserve Banks record and report end-of-day balances for each calendar day during which payment activity occurs, including weekends and holidays? What time frame would be required to these changes? Would banks want the option to defer receipt of such information for nonbusiness days to the next business day? If necessary changes by banks represent a significant constraint to timely adoption of seven-day accounting for a 24x7x365 RTGS settlement service, are there alternative accounting or operational solutions that banks could implement?

We are not in a position to provide thorough answers to these questions or a time frame without a better understanding of the proposed RTGS settlement service. We anticipate the required adjustments will be substantial. The adjustments will most likely take place over time and therefore it may be necessary to provide the ability for some financial institutions to defer the receipt of information from the Federal Reserve until the next business day. Other financial institutions will immediately have systems and staff to support 24x7x365 settlement and message processing to support their end user’s needs. This transition will be like many transitions in the payment ecosystem (i.e. EMV, check imaging) where financial institutions will need different transition considerations as customer bases and needs vary dramatically between financial institutions.

e. What incremental operational burden would banks face if a 24x7x365 RTGS settlement service were designed using accounts separate from banks’ master accounts? How would the treatment of balances in separate accounts (for example, ability to earn interest and satisfy reserve balance requirements) affect demand for faster payment settlement?
Maintaining a separate 24x7x365 faster settlement account would not be that much added burden since we monitor a number of accounts today. To avoid the possibility of balances in the separate account reaching zero, which could create a negative customer experience, there should be the ability to set a low threshold amount that would cause funds to be automatically transferred from the master account. In any case, the ability to move funds to and from their master account on nights and weekends will be required.

The demand and adoption of faster payment settlement will be much greater if funds in the separate account are treated the same as funds in the master account with regard to earning interest and satisfying reserve requirements. Unequal treatment of these funds would be detrimental to the service as well as financial institutions.

f. Regarding auxiliary services or other service options,

i. Is a proxy database or directory that allows faster payment services to route end-user payments using the recipient’s alias, such as e-mail address or phone number, rather than their bank routing and account information, needed for a 24x7x365 RTGS settlement service? How should such a database be provided to best facilitate nationwide adoption? Who should provide this service?

Yes, a proxy database or directory that supports the use of a recipient alias is essential and will need to evolve as tokenization is perfected through innovation.

Any infrastructure built without a recipient directory would fall short of its full potential. Speed and convenience require a free exchange of payment information, which is less likely if these transactions are not stripped of sensitive account information. The benefits of mitigating fraud from such an approach are more obvious.

We see benefit in the Federal Reserve considering the current in market directory solutions. This is not the primary role of the Federal Reserve and they should let free market innovators provide these auxiliary services. Should the private sector fail to meet the needs of the market, we would support Federal Reserve involvement.

ii. Are fraud prevention services that provide tools to detect fraudulent transfers needed for a 24x7x365 RTGS settlement service? How should such tools be provided? Who should provide them?

Fraud prevention tools are essential and a necessary component to any role the Federal Reserve would play in supporting a faster payments infrastructure. Financial institutions can only draw on their own proprietary databases when making real time fraud decisions, so not unlike card network providers, the Federal Reserve needs to step in to ensure financial institutions can harness network level insights. The Federal Reserve can drive the sharing of negative fraud data – bad actor lists/accounts/aliases – across financial institutions to increase the level of confidence in real time settlement. The Federal Reserve can look to private sector providers for innovation and solutions that can be built on top of the real time payments network.

iii. How important are these auxiliary services for adoption of faster payment settlement services by the financial services industry? How important are other service options such as transaction limits for risk management an offsetting mechanisms to conserve liquidity? Are there other auxiliary services or service options that are needed for the settlement service to be adopted?

Each of these auxiliary services are necessary for wide adoption of faster payment settlement. Directories that provide recipient alias and tokenization are essential to meet end user expectations of speed and convenience. Financial institutions will need effective fraud mitigation controls to offer real time payment solutions that customers have confidence in.
Transaction limits are critical from both a fraud and safety and soundness perspective. The Federal Reserve should take a supervisory viewpoint to devise controls that provide the ability to manage individual institution risk, while also providing the ability to impact systemic events on the financial sector. These controls must operate differently in a real time payments environment and easily adapt to changing conditions. Other payment systems have started with lower caps that were later increased and the same method can be followed here. Standing orders to maintain low balance thresholds may also be needed to better manage liquidity.

g. How critical is interoperability between RTGS services for faster payments to achieving ubiquity?

It is absolutely critical that any Federal Reserve operated RTGS service be interoperable with comparable private sector solutions. If the Board were to create a solution that was not interoperable, the negative effect on the faster payments marketplace would be vast. If financial institutions choose to operate two systems, so customers could make and receive payments from users of both systems, it doubles their cost. If financial institutions choose to operate only one system, they risk losing customers when transactions to and from the other system cannot be completed. This will slow down getting to a ubiquitous real time settlement system in the United States.

The Federal Reserve’s check and ACH clearing services are effective because transactions can begin on their system and move to a private sector solution if needed. If the Board pursues a RTGS service a comparable manner to seamlessly move payments from one system to another is a requirement.

h. Could a 24x7x365 RTGS settlement service be used for purposes other than interbank settlement of retail faster payments? If so, for what other purposes could the service be used? Should its use be restricted and, if so, how?

Yes, it should eventually be used for wholesale payments as well as for retail payments. We cannot think of a good reason for it to be limited to settlement of retail faster payments, and transaction limits can be adjusted to accommodate higher dollar payments as RTGS services mature.

i. Are there specific areas, such as liquidity management, interoperability, accounting processes, or payment routing, for which stakeholders believe the Board should establish joint Federal Reserve and industry teams to identify approaches for implementation of a 24x7x365 RTGS settlement service?

If the Board chooses to provide a RTGS settlement service, it will be very important to collaborate with the industry on a number of issues including interoperability, accounting and payment routing. The Federal Reserve has successfully done this in the past, and there will likely be other areas where strong industry participation would provide a benefit. In terms of liquidity management, the Board should move immediately to create a collaborative team. Moving quickly on this would benefit the industry tremendously and it is not dependent on the Federal Reserve becoming a RTGS operator.

4. Should the Federal Reserve develop a liquidity management tool that would enable transfers between Federal Reserve accounts on a 24x7x365 basis to support services for real-time interbank settlement of faster payments, whether those services are provided by the private sector or the Reserve Banks? Why or why not?

Yes. A liquidity management tool should be given the highest priority and developed to serve the private sector solution as well as any Federal Reserve RTGS solution that may be created.

The reasons we strongly support this effort have been discussed in previous responses.
5. If the Reserve Banks develop a liquidity management tool,

a. What type of tool would be preferable and why?

   i. A tool that requires a bank to originate a transfer from one account to another

   ii. A tool that allows an agent to originate a transfer on behalf of one or more banks

   iii. A tool that allows an automatic transfer of balances (or “sweep”) based on pre-established thresholds and limits

   iv. A combination of the above

   v. An alternative approach

A combination of the above since it is important not to place undue restrictions on how the funds may be originated. Each financial institution should be able to use the liquidity management tool in the way that best meets their needs.

Some financial institutions may decide to actively manage funds in both accounts 24x7x365. Some financial institutions may authorize a third party to manage the movement of funds to and from their master account to a dedicated faster payments account. Other financial institutions may look to utilize an automated system that would originate transactions when certain low and high balance thresholds are met. A tool that provides as much flexibility as possible should be a top consideration. This combination approach will enable financial institutions to choose the path that best supports their business model and needs.

b. Would a liquidity management tool need to be available 24x7x365, or alternatively, during certain defined hours on weekends and holidays? During what hours should a liquidity management tool be available?

Financial institutions will need to manage liquidity 24x7x365 whether using a single tool or in conjunction with existing systems. It would be preferable to use one system to manage funds in lieu of using Fedwire during regular business hours, and then switching to a new tool for nights and weekends. It may be worthwhile to explore whether Fedwire can be extended and enhanced to cover nights during the week and weekends. Using an existing system would be easier for financial institutions to implement and reduce development costs and timelines. This alternative should be balanced against the assumption that adding on to legacy systems is not usually an efficient long term solution.

c. Could a liquidity management tool be used for purposes other than to support real-time settlement of retail faster payments? If so, for what other purposes could the tool be used? Should its use be restricted and, if so, how?

The liquidity management tool could be utilized to serve current Federal Reserve systems as well as the anticipated RTGS settlement system.

6. Should a 24x7x365 RTGS settlement service and liquidity management tool be developed in tandem or should the Federal Reserve pursue only one, or neither, of these initiatives? Why?

The Federal Reserve should move immediately towards creating a liquidity management tool that can be used by the private sector RTP solution. This will promote quicker adoption of faster payment services and should not be linked to the development of a Federal Reserve operated RTGS settlement service.
Both initiatives are necessary to provide equitable access to all financial institutions, so the development of a Federal Reserve RTGS settlement solution should be prioritized so that it can quickly follow.

The Federal Reserve’s long standing public policy objectives are for payment systems to be safe, efficient and accessible to all eligible financial institutions on an equitable basis, and through them, to the public nationwide. This is best achieved by pursuing both a RTGS settlement service and a liquidity management tool.

Ubiquitous, nationwide access to faster payment services will be greater if Federal Reserve and private sector RTGS settlement services work in tandem. This approach will provide equitable access to all financial institutions and greater resiliency will be achieved through interoperability.

8. What other approaches, not explicitly considered in this notice, might help achieve the broader goals of ubiquitous, nationwide access to faster payments in the United States?

The Federal Reserve has played a key role as facilitator and catalyst advancing the faster payments efforts over the past 5 years. The Federal Reserve should continue to facilitate cross segment efforts to ensure new faster payment systems meet the needs of all users in the payment ecosystem.

9. Beyond the provision of payment and settlement services, are there other actions, under its existing authority, the Federal Reserve should consider that might help its broader goals with respect to the U.S. payment system?

Rules and standards have often been the domain of the Federal Reserve Band, and should be going forward to ensure new faster retail payments meet the needs of all participants.

Thank you for the opportunity to provide comments on the Federal Reserve Bank’s potential actions to support interbank settlement of faster payments. We share the Board of Governor’s goal of a modern, secure, and innovative payments system in the United States. In closing we would encourage the Board of Governors to act as soon as possible providing clarity to the market as to the expected role of the central bank in the new faster payments ecosystem.

Sincerely,

Jim A. Reuter
President and CEO