Samuel H. Gaer, Chief Information Officer Of the New York Mercantile Exchange

Before the United States House of Representatives Committee on Financial Services

Hearing Entitled

"Protecting our Financial Infrastructure: Preparation and Vigilance"

September 8, 2004

Good Morning. Thank you, Chairman Oxley and members of the committee for inviting me to address the issue of emergency preparation and vigilance for the financial services sector. The subject matter is of timely concern and I sincerely welcome the opportunity to both express what the New York Mercantile Exchange (the Exchange) has accomplished to date, as well as to express concerns regarding areas in which you might consider providing assistance to our efforts going forward.

The Exchange is the world's largest physical commodity futures exchange and has been an example of market integrity and price transparency throughout its 132-year history. Commercial enterprises and government entities all over the world use our futures and options contracts to manage their energy and metals risk, a function that is particularly critical to the global economy in any time of crisis – whether it be a natural or man-made disaster.

The Exchange also plays a vital role in the commercial, civic, and cultural life of New York. It provides thousands of jobs in the financial services and allied industries, and through the Exchange's Charitable Foundation supports cultural and social service programs in the NYC downtown community, throughout the tri-state area where our traders and staff live, Washington, D.C., Houston, TX, and across the country.

The Exchange also endeavors to be a technology leader in the futures industry by providing first-class end-customer software and services as well as developing robust, redundant, and best-of-breed trade management, clearing, and reporting systems capable of quick failover to backup systems when required.

I would like to cover our accomplishments on this subject and provide this committee with the status of our current readiness; what improvements we are planning, the experiences and lessons from 9/11, the blackout of 2003, our testing, our planning for the events and possibilities surrounding the Republican National Convention (RNC), and finally, areas that this committee might consider to aid the ability of this sector to recover during a future emergency.

The Exchange's emergency preparedness efforts may be broken into several distinct but integrated categories: a) the holistic discipline of business continuity planning, b) the more traditional and more narrowly-focused practice of disaster recovery planning, c) the education of the critical staff responsible for our emergency preparedness, and finally, d) the Exchange's external efforts, including coordinated industry testing and providing valuable feedback to the concerns of government and industry agencies and committees such as yours.

No preparedness planning can be accomplished without a careful analysis of the business being protected. It is of critical importance to understand what processes make up our business. Once these are identified they must be prioritized, and this can only be accomplished by assessing the risks and possible impact of those risks on our business through conducting a risk and impact analysis. The Exchange's business continuity planning is based on both of these reviews.

Our core business is trading and clearing. In order to ensure the continuity of this core business, we have pursued several alternatives. The Exchange headquarters was designed to be as redundant as possible including the availability of a back-up generator, which became critical during the blackout of 2003. One of the first priorities for the Exchange after September 11 was to build a replica trading floor. This floor, which was completed in January 2003, is located outside the city, but still within the metropolitan area. It contains full operational trading rings, telephone workstations and booths, and administrative space, as well as a live price feed to the outside world. It would be no more than a couple of hours commute for the furthest trader or staff member. All of our traders and key employees have been provided with directions to the site and, in the spring of 2003, many of our traders participated in a mock trading simulation at the site.

In a situation where access to either site was not immediately available, the Exchange also has two electronic trading systems, both of which have 'round the clock trading capability. In fact, we were the first exchange in New York to reopen following September 11, when we reopened our electronic trading system for a two-hour session on September 14. In those two hours, a record of more than 70,000 contracts were traded electronically as firms leapt for access to the critical energy and metals markets that hadn't been available to them for three days.

The Exchange's business is also comprised of many different process groupings, each of which requires a particular expertise. These business units are each assigned a staff person as well as a backup – called business continuity coordinators (BCCs) - whose responsibility it is to assess the critical processes and to create a workable plan to recover these processes, prioritized according to the risk and impact analysis. The BCC is an individual with working experience and knowledge of the procedures in their specific business unit. The role of continuity coordinator is in addition to their primary job functions. The Emergency Operations Team (EOT), which I will

describe in a few moments, is comprised of the continuity coordinators and the Business Continuity Leader (BCL), whose role it is to coordinate the Exchange's continuity and disaster recovery efforts, head the EOT, and report to the Crisis Management Team.

During an emergency the high-level, strategic decision making authority rests with the Crisis Management Team (CMT). The CMT comprises the five executive committee members of the board of directors, chief officers, and other critical senior executives. Their role is to assess a threat and, if necessary, provide an official declaration of a disaster; to interface with the members of the Exchange; and to coordinate with industry and regulatory agencies. They have been empowered by the board of directors to make the critical business decisions necessary in any emergency recovery effort.

Tactical decisions rest with the EOT; this is where the "rubber meets the road." As described above, the EOT is composed of the BCCs, each of whom is responsible for deploying one of the plan modules. These modules are separate, but coordinated plans, and may be deployed all at once, or separately as the emergency requires.

During any emergency, there is a requirement for a safe and secure place for emergency teams to assemble and manage recovery efforts and coordinate resources. The Exchange maintains emergency operations centers (EOC) at the primary and backup sites. The EOC is a secure area where the CMT can go to manage any event it may face. Each location is prepared with whiteboards, copies of the plans, computers, and digital and analog phone service.

Maintaining communication between recovery units and resources is the single most important aspect of any emergency recovery effort. All aspects of our emergency operations are choreographed via multiple communications links between resources and the Exchange's responders, and are coordinated and managed using an array of communications tools. The Exchange provides multiple layers of tools, which the team members use in the event one or more

fails. Each critical CMT member has been issued a cell phone with a two-way radio, a portable two-way email device - some of which can be used to make emergency phone calls -, a laptop, remote connection software to send and receive data to our network, and a cellular modem card to wirelessly connect to Exchange system resources from anywhere cellular coverage is available. Also available are multiple team-specific conference call numbers, which enable the team to conduct virtual meetings; websites to communicate information to customers, staff, and members; and toll-free hotlines to receive and provide critical information. In addition, the CFTC has sponsored the Exchange to take advantage of the National Communications System's Government Emergency Telecommunications Service (GETS). All critical team members have been issued this important tool.

Disaster recovery planning specifically refers to restoring the information technologies that run our business and provide services to staff and customers. Every critical Exchange system is duplicated and can provide services in the event the main facility or system is unavailable. Data moves across redundant optical fiber links, linking our backup site to the primary site, and allows synchronous or asynchronous replication of data, in both directions. In addition to the wide-area network created between the two hot-sites, the Exchange maintains multiple links to internet service providers.

Training, education, and regular testing will ensure that the systems and staff are ready to respond to any event that disrupts our business. Ongoing planning for events such as approaching hurricanes, planned transit strikes, or the RNC keeps the Exchange's planners in top form. The EOT meets regularly via the pre-configured conference bridge to discuss continuity planning, updating plans, and changes in business processes.

Our industry relies on a complicated inter-relationship of many companies and services. The Exchange is among the leaders in an industry-wide initiative to standardize the protocols

governing the way companies send and receive data. This will allow many companies to develop systems based on a standardized set of protocols, making it easier to deploy and maintain data communications under difficult circumstances. The Exchange and the Futures Industry Association (FIA) have begun planning a major multi-company and multi-exchange coordinated testing effort, which will culminate in a first annual industry-wide disaster recovery test this fall on Saturday, October 9th, 2004. The Exchange already does its own limited testing with member firms. However, this planned test will involve multiple exchanges as well as recovery service providers and independent software vendors. The effort is extremely important to our industry and will be repeated annually.

As a critical infrastructure organization we strive to learn from every event we face. So what were the lessons learned from 9/11, the 2003 Blackout, our mock disaster testing, and planning for the RNC?

The tragic and cataclysmic events that took place on September 11, 2001 showed us that planning for emergencies that involve a single company, building, or service is no longer adequate. Continuity planners must envision and plan for emergencies affecting multiple companies, buildings, infrastructure services, and utilities – emergencies that disable telecommunications, utilities, transportation, vendors, and customers. Multiple layers of communications options must be available to the emergency responders as well as the ability to manage a recovery effort on the fly with mobile technologies that allow the responders to collect information and direct resources. This testimony is a high-level glimpse into the thoroughness of the thought and action we have strived to apply to our recovery planning.

As we look back at 9/11, the relationships the Exchange has forged with government agencies will always be of critical importance, in planning for -- and support during -- an emergency event. The relationships our member firms have formed with important government leaders have

enabled the Exchange to overcome many difficult recovery challenges in the past. Necessary assistance was provided with water transportation for critical Exchange staff, as well as creating access through frozen zones for traders and staff, trucks carrying food, and also fuel deliveries for the Exchange's backup generators.

The blackout of 2003 taught us different lessons. The foremost of which is that a direct hit to a facility is not required to impair our ability to operate. Multiple redundant service providers need to be secured for all critical business services. This event also taught us that as good as our recovery plans are, they are only as good as the customers and business partners we rely on. Part of our vigilance must be to make sure our banking, clearing, and broker partners have themselves planned and prepared.

Other events that Exchange planners carefully considered - the approaching hurricane Isabel in late summer 2003, the planning we have done for the Republican National Convention, and the regular disaster recovery testing and mock disasters that the Exchange conducts all serve to reinforce and fine-tune the planning we have at-the-ready.

Communication stands alone as the key equalizer when facing the surprises any emergency delivers. No plan can forecast the effects generated from a disaster but having good communication plans in place allows our organization to counter this problem with the ability to change course as the emergency response requires – and to immediately communicate those course changes to traders, brokerage firms, clearing firms, customers, and staff.

Chairman, in closing, I ask that this committee consider the following concerns from the Exchange.

As an integral part of the critical infrastructure, the Exchange already manages a full compliment of continuity plans, backup sites, and emergency operations locations.

Uninterruptible power supply systems, backup generators, and redundant data and voice

providers protect our facilities. However, our business necessarily relies upon the coordination of many services within the financial sector. It also relies heavily on the telecommunications, utility, and transportation infrastructure supporting that complex matrix of business partners, over which the Exchange has no control. The Exchange is prepared to recover our systems and business processes if faced with another event such as 9/11. But, the recovery of the services and the price discovery mechanisms we provide to the financial services sector and economy also relies on the resiliency of the external businesses on which the Exchange depends.

I would like to thank the Chairman and the members of this committee for inviting the Exchange to speak with the other distinguished panelists on this extremely important topic. I would be happy to answer any questions the committee has.