

Futures Industry Disaster Recovery Test Briefings

May/June 2005



*Prepared and Moderated by
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AGENDA

- I. Introduction and Welcome
- II. Testing Goals and Objectives
- III. Review of Testing Protocol
- IV. Member Firm Readiness/Discussion
- V. Market Data Vendors Readiness
- VI. Clearing Bank Readiness
- VII. Securities Industry Association Test Initiative Update
- VIII. Timeline and Next Steps

I. INTRODUCTION AND WELCOME

Our Panelists Today:

<i>CBOT: Susan Brown</i>	<i>NYBOT: Ian Nelson</i>
<i>CME: Karl Weinberg</i>	<i>NYCC: Brian Sayler</i>
<i>TCC: James Woods</i>	<i>NYMEX: Eric Aldrich</i>
<i>Eurex US: Todd Rich</i>	<i>SIA: Howard Sprow</i>

II. TESTING GOALS AND OBJECTIVES

- Test the basic ability to conduct business (order entry through clearing) from alternate/back-up facilities simultaneously.
- Test disaster recovery capabilities among futures commission merchants, back-office service providers, recovery services providers, trading system vendors, clearing banks, market data vendors.
- Test the connectivity between exchanges, clearinghouses and their constituents' back-up facilities ("back-up to back-up"), and confirm member firms' ability to send/receive information to/from their back-up facilities/interfaces.

GOALS AND OBJECTIVES ... Continued

- Enter a small but meaningful sampling of orders and trades, carried out by a limited number of essential personnel from alternate locations.
- Confirm the receipt/transmission of information to/from clearing members.
- Transmit key clearing reports and information to clearing firms to verify “round-trip” communications.

GOALS AND OBJECTIVES ... Continued

- Extensive application testing will be unnecessary since there will not be any required changes to application code.
- Success criteria will be defined by each exchange or clearinghouse.
- The exercise scope will be kept manageable from a cost and resource standpoint, so that test can be repeated and performed routinely in the future.
- Market data vendors and clearing banks will test back up connectivity with the exchanges and clearinghouses only:
 - Member firms will not be involved nor impacted by this part of the test.

III. REVIEW OF TESTING PROTOCOL

- Exchanges will specify products available for order entry/trading.
- Except for NYBOT, all exchanges will use their electronic trading venues for the test.
- Firms will use test accounts.
- Testing will take place between 9:00 am and 3:00 pm EDT.
- Member firms will confirm connectivity with their respective exchanges/clearinghouses:
 - Pre-test connectivity test dates will be established.
- Firms will execute a pre-defined script of orders.
- Exchanges will generate fill reports on the orders.

CBOE FUTURES EXCHANGE

- Will use production CBOEdirect ETS.
- Trade entry via scripts:
 - Products to traded: VIX futures.
- Pre-test requirement- users must register via the FIA website and establish back-up connectivity to CFE via the CBOE API Client Relations Group.
- Data will be edited to modify the trade date:
 - Order entry systems will reflect October 15 trade date.
- Trades to be transmitted from CBOEdirect to Clearing Corp. back-up site.

CBOE FUTURES EXCHANGE (Cont'd)...

- The Clearing Corp. will transmit end-of-day files to Options Clearing Corp. back-up.
- Receive OCC data services from OCC back-up.
- OCC to produce gross position adjustments, position adjustments and transfers.
- Transmit trade confirmations from Clearing Corp. back-up to member firms' back-up bookkeeping system.

CHICAGO BOARD OF TRADE

- Will use eCBOT production trading system via back-up site.
- Firms must register via the FIA website.
- No order entry will be permitted.
- CME Clearing will generate 10 trades:
 - December contracts in 10-year T-Notes, Corn and Dow futures.
- CME Clearing will generate a minimum of 10 trades from previous day's trading:
 - Trade date will be October 14th.
 - Buy-side trades will have customer origins and sell-side trades will have house origins.

CHICAGO BOARD OF TRADE (Cont'd)...

- Firms will receive TREP formatted confirmation trade records:
 - Viewable via CME's Internet-based Electronic Trade Poster (ETP).
 - Firm submitted trades will not be included in the test.
- Ability to submit other record types via CME network:
 - EFPs.
 - Change records.
 - These records will not be further processed by CME.
- Confirmation that records have been received by verifying acknowledgement records have been sent by CME clearing systems.

CHICAGO BOARD OF TRADE (Cont'd)...

- Submission of PCS and Large Trader files from either the test files – or - the firm's previous day's activity, modified with the correct submission date.
- Confirm records have been received by verifying via CME's FTP site:
 - No reports will be generated from data submitted by firms.
- Previous days' reports will be available to firms to verify the capability to receive and generate reports at firms' BC/DR sites.

CHICAGO MERCANTILE EXCHANGE

- Will use GLOBEX via remote backup site.
- Firms must pre-register via the FIA's web portal.
- Verify firm connectivity:
 - All GLOBEX Markets will be in Pre-Opening state.
 - Can use either October 14th or October 15th trade dates.
All fills will be sent back to the Firms with the trade date of the 14th
 - Firms can send a test order in any market they wish.
 - No trades will occur during the Pre-Opening period.
 - Firms will verify connectivity and can send/receive messages.

CHICAGO MERCANTILE EXCHANGE (Cont'd)...

- Order entry via test script as follows:
 - Enter bids as customer and offers as house at the settlement price in the market you choose. Please enter about 10 trades.
 - Firms may use any market they want. We do recommend that Firms send orders in on 'Floor Only Contracts, like the SPZ6 that will be listed on GLOBEX for the test.
 - Firms may receive crossed trades and/or trades with other counterparties.
- Trade reporting to firms' back office systems:
 - Should be verified and then deleted.
- Enter ex-pit transactions via CME portal URL.

CHICAGO MERCANTILE EXCHANGE (Cont'd)...

- Change FTP IP address to CME's remote site IP address to be able to:
 - Send Friday's PCS and Large Trader reports.
 - Receive Friday's Trade Register Data and SPAN files.
- Connect to CME FTP site via RDC IP:
 - Using Friday's data, FTP the PCS and Large Trader reports.
 - CME staff will verify receipt and then delete them.
- CME will transmit Friday's Trade Register and SPAN files.
 - Firms will verify receipt of these, delete them and contact the GCC to recap the test results.

CHICAGO MERCANTILE EXCHANGE (Cont'd)...

- Connect to RDC URL and enter a block trade for:
 - 5000 EDH @9740.0
- CME staff will verify receipt of the block trades and then delete them.
- Firms can contact CME Clearing Support (CCS) team to obtain CME Production IP address, RDC IP address or RDC URL address.
- Switch back to CME production site IP address at test conclusion.

THE CLEARING CORP.

- Will test from Clearing Corp. back-up site.
- Members must pre-register via the FIA website.
- Firms will verify connectivity via a ping test from their back-up site :
 - Will receive successful log in message.
- Previous day's clearing reports will be available for firms to retrieve to their back-up processing sites:
 - Match off files.
 - Report files.
 - SPAN files.
- PCS, large trader and/or ex-pit transactions will not be accepted.

EUREX U.S.

- Will use production Eurex U.S. ETS.
- Members must pre-register via the FIA website.
- Firms should confirm all software/versions at firms' **primary** sites including ISV, proprietary and exchange software applications are also running at **back-up** site.
- Firms will conduct a connectivity test:
 - Will receive successful log-in message.
- No order entry will be permitted.
- The Clearing Corp. to provide previous day's clearing reports to members:
 - Match off files
 - Report files
 - SPAN files

NEW YORK BOARD OF TRADE NEW YORK CLEARING CORP.

- Will use back-up trading floor and back-up EOR facilities.
- Futures and options order entry via order entry scripts:
 - Sugar #11 and Cotton
- Trade date will be October 14, 2005.
- Firms must register via the FIA website.
- Order entry via:
 - NYBOT EOR.
 - Clearing member order routing.
 - Phone orders to back-up trading floor.
- NYBOT EOR to NYBOT's back-up trading floor
 - Managed by Securities Dealing Systems (SDS).
 - Will require change in EOR IP address.

NEW YORK BOARD OF TRADE/NEW YORK CLEARING CORP. (Cont'd)...

- Order routing to NYBOT back-up trading floor by phone.
 - Clearing members will call the phone numbers they use to enter orders to the NEA trading floor. Phones will forward to the LIC back-up facility.
 - NYBOT floor will be staffed by NYBOT floor operations personnel, who will answer phones and take orders from clearing members.
- Test cases – TIPS activity:
 - Clearing members will enter ex-pit transactions.
 - NYBOT staff will enter test trades
 - Clearing members will accept test trades and ex-pits.

NEW YORK BOARD OF TRADE/NEW YORK CLEARING CORP. (Cont'd)...

- TIPS intra-day files:
 - Will be available via Data Express.
- Firms will transmit PCS and large trader files to NYCC back-up site:
 - Firms will use production files from October 14 trade date.
- NYCC will generate end of day files:
 - Match off file
 - SPAN file (to be available through CME SPAN web site)
 - Will be available through Data Express

NEW YORK MERCANTILE EXCHANGE

- Will use ClearPort TMS back up system.
- Trade date will be October 17, 2005.
- Firms must pre-register via FIA website.
- Questions may be directed to NYMEX Director of Business Continuity – BCP@NYMEX.COM.
- Test environment will be monitored and managed via conference bridge set up for the test.
 - Bridge will act as test squawk box – monitored by NYMEX staff
 - All problems will be brought up via bridge (taken off-line if necessary)
 - Test will be managed via bridge.
- Order entry will be via scripted trades entered into system by NYMEX staff.

NEW YORK MERCANTILE EXCHANGE (Cont'd)...

- Production accounts and products will be used.
- Production data will be backed up and restored over test data. Test data will be saved for subsequent review.
- Detailed test scripts describing what the firms are expected to do and when to do it will be created and provided to registered firms prior to the test date (first week in September).
- The backup dial-up (RJE) numbers will be re-sent to registered firms the same week.
 - Test links will be provided for ClearPort TMS.
 - New service: SFTP will be used to download or upload data. However, DR RJE numbers will also be available to connect to our backup site (these have already been provided to all firms with connectivity to primary site).

NEW YORK MERCANTILE EXCHANGE (Cont'd)...

- Firms to connect to NYMEX via their back up sites.
- The Exchange will enter trades at DR site for allocation (give-ups) to registered participating firms.
- NYMEX Clearing will process all end-of-day reports:
 - Produce 591 Member Trade Register report.
- Data/Report Transfer
 - Members will upload the previous day's PCS and Large Trader reports via RJE backup lines.
 - Firms will retrieve clearing reports and data from Member Trade Register report and CM Download site.
- NYMEX will confirm report data against trades from test script.

EXCHANGE AND CLEARING HOUSE TESTING MATRIX

	CBOE Futures Exchange	CBOT	CME	TCC	EUREX US	NYBOT & NYCC	NYMEX
<i>Back-Up Trading Floor Will Be Open</i>	N	N	N	N/A	N/A	Y	Y
<i>Systems To Be Used</i>	CBOEdirect Production	eCBOT Production	GLOBEX Production	B/U	Eurex US Production	EOR B/U	B/U
<i>Members Will Verify Connectivity Via Ping Test</i>	Y	Y	Y	Y	Y	Y	Y
<i>Successful Login From Members' DR Site</i>	Y	N		Y	Y		
<i>Trade Date = October 14, 2005</i>		N/A	Y*	N/A	N/A	Y	Y
<i>Trade Date = October 15, 2005</i>	Y	N/A	Y*	N/A	N/A		
<i>Receipt of 10 Orders From Member Firms Via Pre-Defined Scripts Of Orders Phone Or EOR/Member Order Routing Venues</i>	Y Y	N	Y	N/A	N	Y Y	Y
<i>Transmit 10 Fill Reports to Member Firms Generated By Exchange Floor Staff Back to Firms</i>	Y	Y Y	Y	N/A	N	Y	Y
<i>Receipt of 10 Ex-Pit Trade Reports From Member Firms Via Pre-Defined Scripts</i>	N	Y Y	Y	N	N N	Y	Y
<i>Receipt of PCs and Large Trader Reports From Member Firms</i>	Dependent on SIAC	Y	Y+	N	N	Y	Y
<i>Download of Previous Day Clearing Reports To Member Firms Match Off File Report File Span File</i>	Depend on OCC Depend on OCC Depend on OCC	Y	N N N	Y Y Y	N/A	Y Y	
<i>All Production Systems Are Restored & Test Data/Parameters Re-set</i>	Y	Y	Y	Y	Y	Y	Y



* CME will accept either October 14 or October 15 trade dates on order input.

+ CME will accept previous day (October 14) large trader report information.

IV. MEMBER FIRM READINESS

- Discussion with member firms as to the state of their readiness:
 - Back-up systems/communications links.
 - Order entry and routing.
 - Give up processing.
 - Clearance and settlement.
 - Use of third party service providers.
- Major issues or concerns.

V. MARKET DATA VENDOR READINESS

- Back-up communications testing between the exchanges and key market data vendors only:
 - Bloomberg
 - CQG
 - DTN
 - eSignal
 - Future Source
 - Reuters
 - Securities Dealing Systems
 - Thomson Financial

VI. CLEARING BANK READINESS

- Back-up communications testing between the exchanges/clearinghouses and the main clearing banks only:
 - Bank of America
 - Bank of New York
 - Bank Paribas
 - Brown Brothers Harriman
 - Burling Bank
 - Harris Bank
 - JP Morgan Chase
 - Lakeside Bank
 - S.W.I.F.T

VII. SECURITIES INDUSTRY ASSOCIATION TEST INITIATIVE UPDATE

- Update on SIA's October 15th industry test.
- Test scope and objectives.
- Operational elements involved.
- Test protocol.
- Potential impact on futures industry test initiative.

VIII. TIMELINE AND NEXT STEPS

- June**
 - Exchanges formally announce October 15th date to membership.
 - Exchanges notify clearing banks, market data vendors, key service providers, recovery service providers of the test.
 - FIA implements online web site for firm test registration.
 - Bi weekly calls with Steering Committee, Working Groups.
 - Develop first draft of test scripts for review.
- July:**
 - Bi-weekly calls with Steering Committee, Working Groups.
 - Finalize and distribute test scripts.
- Aug.**
 - Bi-weekly calls with Steering Committee, Working Groups.
- Sept.**
 - Symposium meetings in Chicago and New York.
 - Bi-weekly calls with Steering Committee, Working Groups.
- Oct.**
 - Weekly calls with all.
 - Test on Saturday October 15th.
 - Post mortem review of test results.