CONSOLIDATED AUDIT TRAIL ("CAT") CLOCK SYNCHRONIZATION CERTIFICATION BY

TO

PARTICIPANTS OF THE CAT NMS PLAN

CLOCK SYNCHRONIZATION CERTIFICATION BY hereby acknowledges that it is a member of the following		
national securities exchange(s) and	/or national securities association(s)	e
□ BOX Options Exchange LLC	☐ Financial Industry Regulatory Authority, Inc.	□ NASDAQ MRX, LLC
☐ Cboe BYX Exchange, Inc.	☐ Investors Exchange LLC	☐ NASDAQ PHLX LLC
☐ Cboe BZX Exchange, Inc.	☐ Miami International Securities Exchange LLC	☐ The NASDAQ Stock Market LLC
☐ Cboe C2 Exchange, Inc.	☐ MIAX PEARL, LLC	☐ New York Stock Exchange LLC
☐ Cboe EDGA Exchange, Inc.	☐ MIAX Emerald, LLC	□ NYSE American LLC
☐ Cboe EDGX Exchange, Inc.	□ NASDAQ BX, Inc.	□ NYSE Arca, Inc.
☐ Cboe Exchange, Inc.	□ NASDAQ GEMX, LLC	☐ NYSE National, Inc.
☐ Chicago Stock Exchange, Inc.	□ NASDAQ ISE, LLC	☐ Other:
including any interpretive or exempexchange and/or national securities Requirement"), the undersigned, where the securities (1) synchroniz for Manual Order Events of	th the clock synchronization require of the guidance applicable to such rule association identified above (the "Cho is duly authorized to execute this, hereby certifies that ted its Business Clocks, other than ser used solely for the time of allocations."	le, of each national securities Clock Synchronization s certification on behalf of has: cuch Business Clocks used solely on on Allocation Reports, at a
minimum to within a fifty ((50) millisecond tolerance of the tin	ne maintained by the National

to within a one second tolerance of the time maintained by the National Institute of Standards and Technology, and maintains such synchronization.

(B) its Business Clocks used solely for the time of allocation on Allocation Reports at a minimum

synchronized (A) its Business Clocks used solely for Manual Order Events and

Capitalized terms are defined as set forth in the CAT compliance rule series of each national securities exchange and national securities association.

Institute of Standards and Technology, and maintains such synchronization; and

(2)

Ву:	
Name:	

EXECUTED as of the date first written above.