



**THE FOUNDATION
FOR SECURE
MARKETS®**

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This guide is for informational purposes only. All scenarios discussed are subject to change depending on the outage circumstances.

Introduction

Periodically, OCC observes unscheduled closings, which are typically the result of natural disasters, ad hoc National Holidays, disruptions of infrastructure, and other unpredictable events. With such situations, equity underlying exchanges may be unavailable.

OCC is issuing this guide to inform external stakeholders of the manner in which OCC expects to operate in the event of an unscheduled closing. Exchanges and members should review their own internal processes to ensure there will not be any conflict with OCC's planned outage response.

Specific situations may cause deviation from the contents of this guide. All items are subject to change depending on the circumstances, and consequently OCC may determine to proceed using alternative methods as a situation may necessitate. In the event of an unscheduled closure, OCC will issue an information memo that will detail how processing will occur during the closure and what prices will be used for expiration processing.

Planned Response

In the event of an unscheduled closing, OCC intends to conduct processing within normal production time frames. However, unexpected scenarios may require deviations from normal processing times. OCC will work with the industry to address those situations. OCC's objective is to have minimal impact or disruption to any of OCC's external stakeholders.

Below is a chart of existing OCC processes compared to a hypothetical example where all or some of OCC's exchanges have an unscheduled closing.

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OCC Unscheduled Market Closure Processing

The following chart represents OCC's intended response. All items are subject to change if market factors dictate alternative actions.

Process	Description	Status
Daily Settlement	OCC will conduct daily cash settlement activities subject to the availability of settlement related banks. OCC expects Members to meet all daily settlement time frames.	Normal time frames
Collateral Processing	OCC will support collateral processing subject to the availability of DTC and supporting banking institutions. Membership will be expected to recognize all normal collateral windows.	Normal time frames
Trade Processing	Trade processing would continue for any exchange that remains open. There could be a scenario where options exchanges close, but futures exchanges remain open.	Trade processing available, if needed
Clearing Member Input	OCC Members submitting LOPR, CGM, Large Trader, Delta Position Limit, or Spread files should expect submission to be conducted within normal time frames.	Normal Window time frames maintained
Post-Trade Activity	OCC Members submitting post-trade activity including position transfers and adjustments should expect submission to be conducted within normal timeframes.	Normal Window time frames maintained
Stock Loan Activity	OCC is reliant upon DTC availability to complete stock loan processing. If available, OCC would be prepared to process and clear Hedge Program / Market Loan activity. It is anticipated that the last available equity prices will be used for stock loan mark to market.	Normal processing
Exercise Instructions	OCC will accept exercise instructions and process exercise and assignment activity. OCC participant exchanges may elect to restrict exercises of non-expiring American-style index options pursuant to their rules.	Option exercises will be accepted
Proprietary DDS	OCC sends out proprietary trade, settlement, position movement, account and collateral information on a daily basis. OCC would continue to make these daily files available in both push and pull formats.	Normal time frames
Non-Proprietary DDS	OCC series, RBH, and price files would be distributed at normal time frames.	Normal time frames
ENCORE Screens and Reports	Normal access to ENCORE and ENCORE report generation.	Normal access
Margin processing	OCC would process risk and margin amounts using normal methodologies.	Normal time frames

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Proposed Cash Settled Product Settlement Prices

Expiration Settlement Prices

Equity and ETF/ETN Options

If an outage or other event at either an underlying or option exchange prevents OCC from obtaining a closing price for a product, OCC will apply OCC Rule 805 in assigning a settlement price. OCC Rule 805 permits the use of the last available sale price during regular trading hours on the most recent trading day for expiration processing for equity and ETF/ETN options.

Index Futures

If an outage or other event at either an underlying or futures exchange prevents OCC from obtaining a closing price for a product, OCC will apply Article XII, Section 5 of the OCC By-Laws in assigning a settlement price. Article XII, Section 5 of the OCC By-Laws permits the OCC to fix a final settlement price, based on what is appropriate for the protection of investors and the public interested, taking into account fairness to buyers and sellers, the maintenance of a fair and orderly market, past precedent, and the actions taken in related futures or other markets.

Index Options

Pursuant to Article XVII, Section 4 of the OCC By-Laws, settlement prices for cash settled index options shall be determined by a panel(s) of exchanges in the event that exercise settlement amounts are unavailable. It is anticipated that such panels will fix cash settlement amounts in the manner provided below; however each such determination will be made on a case-by-case basis in the event of an unscheduled market closure depending on the facts and circumstances at that time.

Unscheduled Market Closure with Little to No Advanced Notice – Index Products

In the event of an unscheduled market closure that is announced with little to no advanced notice of the closure, it is anticipated that the SOQ (i.e., opening sales price in the primary market of each component security) settlement price from the next trading day following the closure will typically be used for expiration processing.

Unscheduled Market Closure with Advanced Notice – Index Products

In the event of an unscheduled market closure that is announced with some advanced notice, such as would be expected for an unscheduled but officially declared holiday, it is anticipated that the following settlement prices will be used for expiration processing:

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Day of Closure	Option Type	Exercise Style	Settlement Price*	Cash Settlement Date (T+1)*
Monday	Index	PM	Friday EOD	Tuesday
Tuesday	Index	PM	Monday EOD	Wednesday
Wednesday	Index	PM	Tuesday EOD	Thursday
	Volatility Index	AM	Thursday SOQ	Friday
Thursday	Index	PM	Wednesday EOD	Friday
Friday	Index	PM	Thursday EOD	Monday
		AM	Thursday EOD	Monday

EOD indicates settlement occurs based on the official End of Day closing price

SOQ indicates settlement occurs based on the opening sales price in the primary market of each component security.

*Settlement Prices and Cash Settlement Dates are reflective of a one-day market closure. Different Cash Settlement Dates may apply in the event of a multiple-day market closure and will be determined on a case-by-case basis.

Following the declaration of an unscheduled market closure, OCC will publish an information memo detailing the final determination of the panel(s) regarding settlement prices for cash settled option products, settlement prices for index and security futures, and confirmation of other processing timelines.

Market Wide Circuit Breaker

In the event that an intra-day Market Wide Circuit Breaker (MWCB) of 20% is triggered so that trading is halted for the remainder of a trading day, it is anticipated that the SOQ settlement price from the next trading day following the closure will typically be used for expiration processing for p.m.-settled index products.

Operational Considerations

In the event that the SOQ settlement price from the next trading day following a market closure or market wide halt will be used, OCC systems require a settlement price for expiration processing. Consequently, the last known price from either the prior trading day or the current day in the event of a market wide trading halt, may be used for processing purposes. OCC will make subsequent adjustments to settlement obligations to account for differences between the last known price used for processing and the SOQ price from the next trading day.

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Communication Regarding Closure

In the case of an unscheduled closure, an Information Memo will be posted to OCC's public website (www.theocc.com) that provides details and overall guidance. Subscribers to OCC email broadcasts and ENCORE users will be alerted to Memo updates via emails or broadcast radars. The following information may be provided in the Memo:

- Confirmation of standard settlement processing or guidance on any changes in settlement price methodology. In the event of certain exchange unavailability, OCC has discretion to use the last available closing price from a previous date for equity and ETF options. Identification of which Settlement Prices will be used for cash settled products will be included in the memo.
- Confirmation of standard collateral processing or guidance on any changes.
- Guidance on any Extended Trading Hours activity that may be planned while some exchanges are unavailable.
- Updates on which exchanges or industry utilities are unavailable, root causes and outage estimates.
- Details on which exchanges may be submitting trade activity.
- Updates to OCC processing times.
- Explanation of any changes to standard exercise and assignment activity. Additional information regarding settlement date can be passed along after receiving confirmation from DTCC on whether the outage date was considered an active settlement date.
- Detail any changes to available reports, ENCORE screens, DDS transmissions, and inbound file timeframes such as LOPR, CGM, PCS or Delta Position Limit.

Additional Information

For more information on closing prices for underlying securities at expiration for unavailable exchanges, see OCC Rule 805(j) of the OCC Rules (<https://www.theocc.com/Company-Information/Documents-and-Archives/By-Laws-and-Rules>). With regards to hedge program / stock loan positions, OCC will use the previous day's underlying prices for mark to market when exchanges are unavailable.

To observe past outage Memos, please see Memos #22480, #31463, or #44143 at www.theocc.com.

Please contact Member Services at 800.621.6072 or memberservices@theocc.com with questions.