OTC IRS Margin Methodology

CME uses a Historical Value-at-Risk model for IRS margining

- Historical shocks are scaled to simulate potential volatility environments prior to generating a profit (loss) distribution for VaR calculations
- Volatility rescaling used to determine margins for a given portfolio
- Model incorporates at least 1,260 days (5 years) of 5-day log returns and uses a 99.7% confidence level
  - Model includes extreme historical stress markets beyond the 5-year window (i.e. Lehman default)
- Achieves a 99% 5-day coverage standard minimum
- Includes a liquidity add-on for additional coverage on concentrated positions
  - Liquidity charged per currency
- This model provides:
  - Desired portfolio coverage
  - Scalability (multiple currencies, asset classes)
  - Simplicity, transparency and easily replicable
- EWMA Historical VaR model adjusts historical shocks (returns) to account for an estimate of volatility over the future 5-day horizon; typically, margins are higher than plain (“un-scaled”) Historical VaR as volatility is forecasted to ramp up and vice-versa