

- (1) A description of the risk-based margin calculation methodology;
- (2) The assumptions upon which the methodology was designed, including the risk analysis tools and procedures employed in the design process;
- (3) An explanation as to whether other margining methodologies were considered and, if so, why they were not chosen;
- (4) A demonstration of the margin methodology as applied to real or hypothetical clearing scenarios;
- (5) A description of the data sources for inputs used in the methodology, e.g. historical price data reflecting market volatility over various periods of time;
- (6) A description of the sources of price data for the measurement of current exposures and the valuation models for addressing circumstances where pricing data is not readily available or reliable;
- (7) The frequency and circumstances under which the margin methodology will be reviewed and the criteria for deciding how often to review and whether to modify a margin methodology;
- (8) An independent validation of Applicant's systems for generating initial margin requirements, including its theoretical models;
- (9) The frequency of measuring counterparty risk exposures (mark to market), whether counterparty risk exposures are routinely measured on an intraday basis, whether Applicant has the operational capacity to measure counterparty risk exposures on an intraday basis, and the circumstances under which Applicant would conduct a non-routine intraday measurement of counterparty risk exposures;
- (10) Preliminary forecasts regarding future counterparty risk exposure and assumptions upon which such forecasts of exposure are based;
- (11) A description of any systems or software that Applicant will require clearing members to use in order to margin their positions in their internal bookkeeping systems, and whether and under what terms and conditions Applicant will provide such systems or software to clearing members; and
- (12) A description of the extent to which counterparty risk can be offset through the clearing process (i.e., the limitations, if any, on Applicant's duty to fulfill its obligations as the buyer to every seller and the seller to every buyer).

c. Limiting Risk - Provide as **Exhibit D-3**, a narrative discussion addressing the specifics of Applicant's clearing activities, including:

- (1) How Applicant will collect financial information about its clearing members and other traders or market participants, monitor price movements, and mark to market, on a daily basis, the products and/or portfolios it clears;
- (2) How Applicant will monitor accounts carried by clearing members, the accumulation of positions by clearing members and other market participants, and compliance with position limits; and how it will use large trader information;
- (3) How Applicant will determine variation margin levels and outstanding initial margin due;
- (4) How Applicant will identify unusually large pays on a proactive basis before they occur;
- (5) Whether and how Applicant will compare price moves and position information to historical patterns and to the financial information collected from its clearing members; how it will identify unusually large pays on a daily basis;
- (6) How Applicant will use various risk tools and procedures such as: (i) value-at-risk calculations; (ii) stress testing; (iii) back testing; and/or (iv) other risk management tools and procedures;