Minimum Capital Requirements

Dan Sarti
Director, Credit Risk & Surveillance

Eliminate Tangible Asset Test

Minimum capitalization language in the tariff currently calls for minimum thresholds of tangible assets **OR** tangible net worth depending on market participation

- $10 MM in tangible assets or $1 MM tangible net worth for FTR market; $5 MM tangible assets or $500K tangible net worth for all other markets
- Tangible asset test does little to ensure a participant has the appropriate balance sheet capitalization to attract additional capital if needed
  - Does not take into account leverage that may exist on balance sheet (participant could be insolvent)
  - Participant could initially fund itself with $10 MM of debt and have no ability to raise additional capital
- Tangible net worth is a better measure of “skin in the game”
  - Requires a level of equity buffer that investors could lose
  - TNW threshold should be a multiple of stressed potential loss to help ensure an ability for a participant to weather extreme market moves

Purpose of minimum capital requirements

Minimum capital requirements are predicated on the idea that PJM is seeking additional financial wherewithal on the part of participants above the amounts posted to satisfy credit requirements

- Minimum capital requirements serve as a “shock absorber” or additional buffer against extreme market movements and provide an additional “cushion” or layer of protection against the risk of participant not having the ability to post collateral
- Minimum capital requirements are a very rough tool as there are many factors that will impact a participant’s ability to provide additional collateral to PJM when necessary
- For well-capitalized companies this is a “free” way to cover tail risk without having to inefficiently post higher levels of collateral to cover tail risk events

Threshold Based On TNW Cushion Relative To Outlier Risk

Participant TNW should be a multiplier of collateral required during outlier market event

- Outlier market events represents price outcomes at the tails of market price distributions, beyond what is assumed when performing the initial margin calculation
  - Price outcomes represent an area where initial margin would fall short of collateral coverage
- **TNW threshold requirement should be a multiple of the calculated dollar value of incremental collateral resulting from outlier event**

Approaches to determining level of outlier risk

Assumptions behind calculation for outlier risk must be established

- What underlying positions do we assume when performing the calculation?
  - Implement tiers of minimum capital thresholds?
- Do we assume an “typical” market position?
  - One flat threshold for all participants?
- What holding period do we use?
  - Should represent required time frame to post collateral including cure period
- What multiple of TNW do we apply to calculate the minimum TNW threshold?
  - Consider that the participant may be active in other markets where they may also be subject to collateral calls

Next Steps

Next steps before next FRMSTF

- Encourage feedback and suggestions from members
- Complete internal modeling for determining appropriate outlier stress calculation