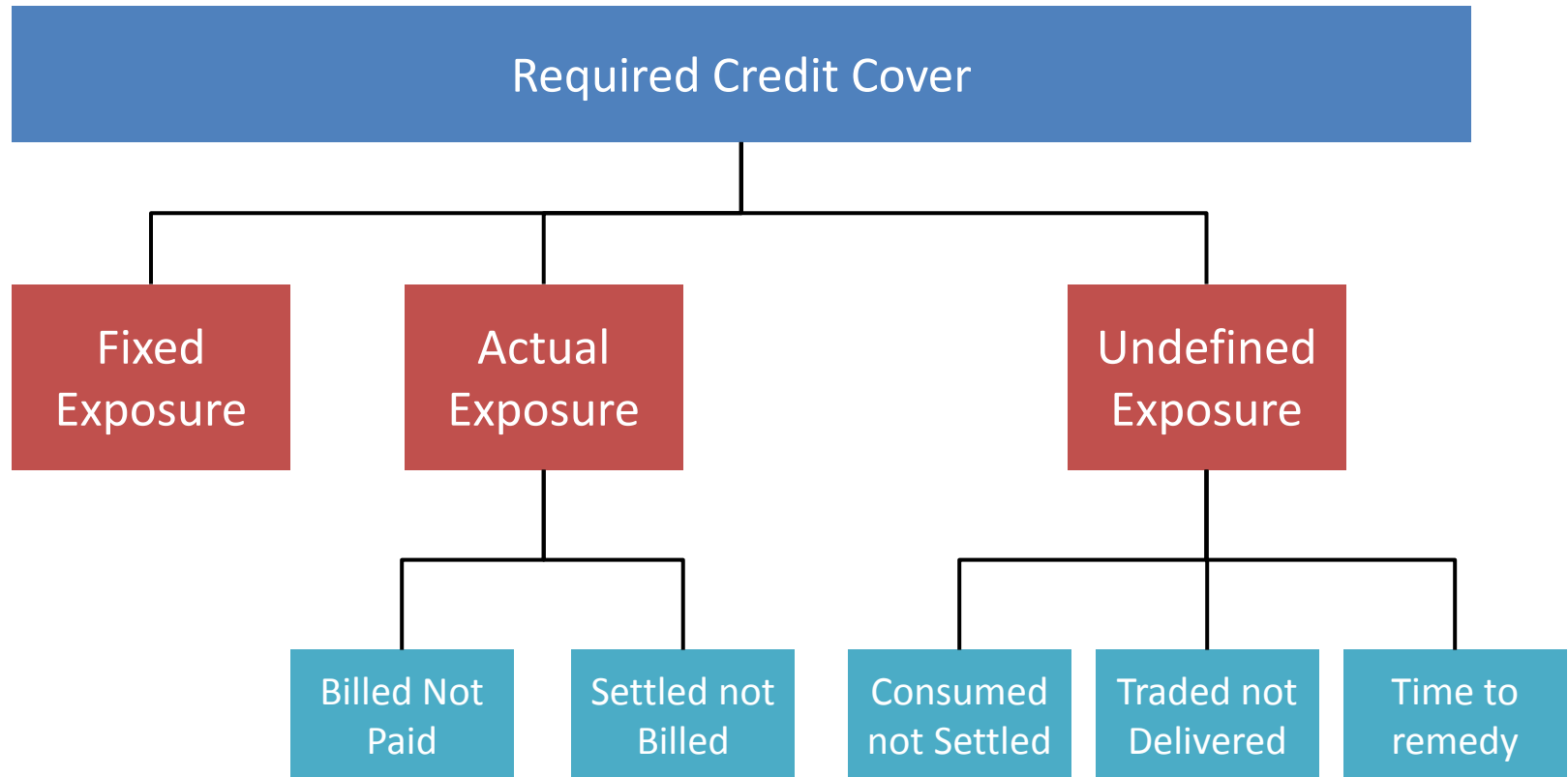


Chapter 5: I-SEM Implementation

Implementation for the I-SEM



I-SEM Implementation

- The implementation approach for I-SEM leveraged on the SEM implementation
- The approach of New/Adjusted/Standard participant persists
- The current model based on actual exposures and undefined exposures continues to apply
- The statistical calculation for undefined exposure for energy persists
- Settlement Reallocation Agreements are considered in the determination of each participant's Required Credit Cover calculation
- This is the process whereby one participant assigns financial responsibility to another
- The approach for I-SEM is for a transfer of full financial rights, liabilities and/or obligations between two participants

I-SEM Implementation – Generator Calculations

- There is a separate approach for the calculations for supply and demand
- For generators, we continue with SEM model based on historical settlement
- This means generators need to cover their imbalances only, as well as their Traded Not Delivered exposure
- Sales to any SEM NEMO are between the participant and their SEM NEMO
- There is a further impact for generators who are constrained off
- When they sell in the ex-ante market they get paid by a SEM NEMO
- When they are constrained off in the balancing market, they owe money to SEMO
- This may create large collateral requirement on these generators under the TSC
- In turn, this has led to the creation of a **payments in advance** process

I-SEM Implementation – Payments in Advance

- This allows generators to meet their collateral requirements
- Payments are made into the collateral reserve account
- These accrue during the SEMO billing cycle (same as current SEM)
- This allows participant to take cash receipts from ex-ante market sales and lodge these directly to the SEM collateral reserve account
- When SEMO issues its **Settlement Documents** after each billing cycle, full settlement amounts are shown
- At payment date, surplus from collateral reserve account is transferred to the clearing account

I-SEM Implementation – Supplier Calculations

- For suppliers, as we noted earlier, to continue with SEM model based on historical settlement would not be full collateralisation
- Calculating based only on imbalances would result in unsecured risk in the balancing market once a supplier ceases trading in the ex-ante markets
- As a result, the calculation for suppliers is based on:
 - *Statistical calculation of their historical metered volumes*
 - *Statistical calculation of the imbalance settlement price*
 - *Capped at the “strike price” for capacity market settlement*
 - *This means they are not exposed to scarcity prices should they arise*

I-SEM Implementation – Capacity calculations

- Capacity payments and charges are now calculated based on ex-ante auctions
- As a result, we can calculate the credit that a generator is entitled to because we know what their payment will be based on their awarded capacity
- Suppliers charge is determined by calculating a capacity charge price based on what needs to be paid
- For Credit Cover calculations, this is simulated by pro-rating the payment according to their share of demand (both actual and forecasted)

Credit Cover Increase Notice



Credit Cover
Report published
containing CCIN value

1st Working Day

2nd Working Day

Three credit assessments
daily

17:00

17:00

17:00

- There are three credit assessments run daily
- Where there is insufficient credit cover, a **Credit Cover Increase Notice** applies
- A participant must remedy this **within 2 working days**
- At any stage within the 2 Working Days a Participant can:
 - Submit increased collateral
 - Pay Bill(s) (before due date if necessary)
 - Use ex-ante markets to offset volumes

If a CCIN is not
remedied by 17:00
2WD, the Participant
is in Default & will be
Suspended from the
Market