Market Code Consultation WS 7

Credit Cover Why is it needed?/International experiences



NECOM NATIONAL ENERGY CRISIS COMMITTEE

First - Let's align terminology

- Settlement is the process of calculating the physically traded amounts and turnovers in the organized electricity markets i.e. the Settlement statements as per the Market Code.
- **Financial Clearing** is the process of updating the accounts of the trading parties and arranging for the transfer of money.
- Financial Settlement is the actual exchange of money, or some other value.
- Clearing House (CH) is an entity responsible for financial clearing and settlement including inter alia financial crediting and debiting, generation of invoices, assessment of market participant creditworthiness and collateral management.
- Central Counter Party (CCP) is contractual party to all trades occurring in a certain market and thus it guarantees the financial fulfilment of all trades executed.
- Credit Cover = Collateral = Security Deposits = Margin calls!



Why do we need Credit Cover?

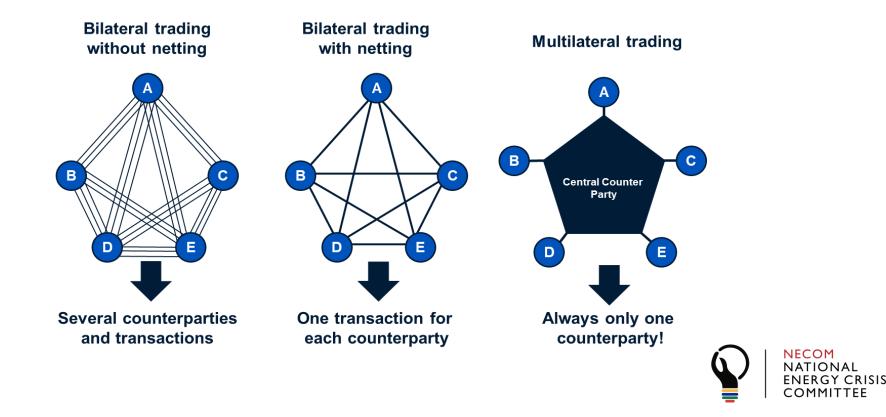
- The Market Operator is the CCP for the whole market but at the end of the day doesn't have money.
- It shall guarantee that a seller gets its money on time.
- It is therefore paramount to **establish this trust** that the Market Operator have access to credit cover to ensure a safe financial sustainability of the market.
- Any support for vulnerable groups shall be kept outside of the financial operation of the market.

AND

- The model needs to be **neutral** and "bullet proof".
- It needs to be rule-based on the real risk exposure for the Market Operator
- It can be seen as the **same as a "wallet"** show me the money so I can allow you to trade!
- We don't want an ENRON-case in South Africa.



Risk management– Settlement through a Central Counterpart



Functions of the Central Counterparty

- Acts as **intermediary** between buyer & seller for every trade.
- **Guarantees** every buyer receives power and every seller: payment.
- Bears the **Credit Risk** involved in every transaction.
- Ensures **timely cash flow** from buyer to seller.
- Issues daily **settlement statements** for each active Market Participant.
- Maintains all trading member records for legal and audit & regulatory requirements.
- CCP conduct **Due Diligence on** *one* **Counterparty only**.
- Supports **market transparency** e.g. trade data, all pricing and aggregated volumes published.
- Netting of transactions reduces administrative work and costs!





Risk Management - Risks the MO face and have to mitigate

Credit Risk & Market Risk

- > Participant failure to honor bankruptcy i.e. default or bank fails to honor a guarantee.
- ✓ Trades settled daily, invoiced monthly & collateral posted (and checked daily).
- ✓ Guarantees: monitor banks (ratings, exposure / concentration).
- ✓ Market Risk if the calculations are not done properly mitigated through Market Code

Liquidity Risk

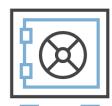
- > MO as cash settlement manager fails to pay a seller of power.
- ✓ MO maintains a positive net cash position: buyer debit BP+5WD & seller credit BP+8WD
- Cash & liquid on-demand guarantees.

Risk Capital

- > Multiple participant & bank defaults.
- ✓ Should NERSA require MO to hold reserves or 'Risk Capital'?
- ✓ Could also have credit facility? (Insurance or similar but with whom?).









Example of Credit Cover structure

THE CREDIT COVER CALL

Pledged cash account or an 'on-demand-guarantee'.

BASE CREDIT COVER

Covers overnight risk associated with intraday position changes.

DEFAULT FUND

Guarantee fund or reserve fund to which users contribute and enforce a loss-sharing scheme among its members

DAILY CREDIT COVER CALL

VARIATION CREDIT COVER

Based on historical behavior in the markets

MINIMUM CREDIT COVER CALL

Covers "worst case" loss during a close out period

Extra Ordinary Credit Cover Call

Based on Rules ability to call for extra credit cover with short notice



Types of Credit Cover

Pledged cash account

The pledged cash account **agreement will be established** and maintained as a semi-blocked account. This means that credit cover will always be blocked on the account, but any amounts excessive of the credit cover call can be withdrawn by the customer with prior consent by the MO. The pledged account must be opened with an approved Settlement Bank. The pledged account can also be used for settlement of daily trades (= clearing account).

On-demand guarantee/Bank guarantee

The on-demand guarantee is a bank guarantee that imposes a primary obligation on the guarantor to pay the beneficiary in first demand. The guarantee acts as security for the liabilities (or the payments) of a buyer towards the Market Operator. The standard guarantee needs to be approved by both the Market Operator and the respective Settlement Bank



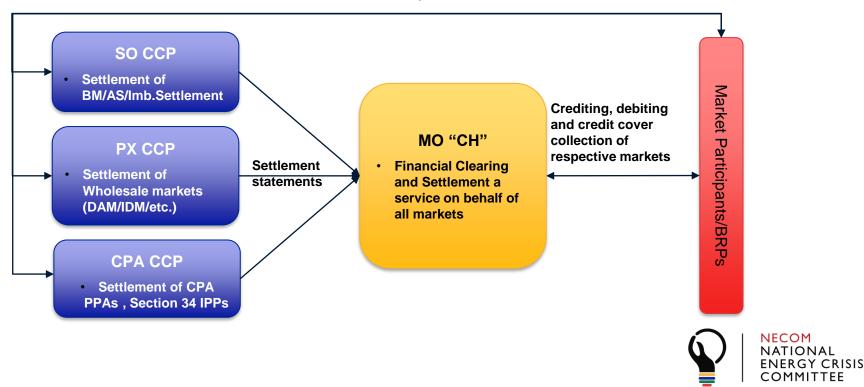
Bank Guarantee





Settlement of all trades from SO, MO and CPA

Contractual relationship on trades and services



Financial Settlement Timeline = Financial Risk Period!

Financial Risk Period									
Billing Period Data		Data V	Verification Period		Payment Period		Suspension Period	→	
		P1		P2 P3		P4 P5	:	P6	
Settlement Period	P1 – Indicative Settlement Statements	P2 – Verification period finished	P3a - Initial Settlement statements sent	P3b – Invoice sent	P4 – Invoice due	P5 – Credit due	P6 – Suspension Period	Maximum Financial risk period	Default rerun
Billing Period (Monthly)	SD +1WD at 17:00	SD +4WD at 17:00	BP+5WD at 12:00	BP+5WD at 12:00	BP+8WD at 12:00	BP+9W D at 17:00	2WD + 1WD	D+34WD	(BP+20WD)



Credit Cover process (2)

Elements in the calculations:

- 1) Amounts invoiced but not paid: Amounts presently owed between P3 and P4.
- 2) Amounts calculated but not invoiced: Indicative settlement statements has been released for the Settlement day, but not yet invoiced the period between P1 and P3.
- Exposure incurred but not calculated: Exposures related to a period that has passed (and electricity has been consumed), but the Indicative Settlement Statement amount has not yet been determined – the period between D and P1.
- 4) Potential exposures during 'Time-to-suspend': If a Participant defaults on their financial obligations, then the MO will draw down on their Credit Cover and may issue the Participant with a Suspension Order. The Participant will be granted a defined amount of time to comply with a Suspension Order before a Suspension takes effect. Time period between P4 and P6.
- 5) (Resettlement exposures: Additional exposures that may result from Resettlement of an already settled period.) Covered in the point 4 period



The calculation of 1 and 2 is easy as these are known numbers (so essentially a sum of the calculated charges for the days in the period)

Suggestions to cover for 3 and 4:

Use the last Working day's data where Indicative Settlement statements exist to cover for the 3WD «time to suspend» period

Development of Credit cover over time:

