



Scope

- Operation of Back to Back Balancing
- Peaking changes
- Effect of Small Tolerances
- Nomination Cycles

MAUI
Maui Development Limited

Back to Back Balancing

This section of the presentation concentrates on:

- The adaption of Back to Back Balancing into an MPOC framework.
- The cost allocation mechanism.
- A method for allocating cost to parties who have caused imbalance, but are back in balance at the end of the day.

MAUI
Maui Development Limited

Adaption to MPOC Framework

- Removal Of ILON Mechanism. No imbalance pay-backs.
- Removal of Incentives Pool Mechanism.
- Adaption of a Cost Allocation system based on Running Operational Imbalance, but with cost allocation assessed daily.

Note: Back to Back Balancing is a system for allocating balancing gas costs, it does not affect balancing gas purchase arrangements nor does it affect decisions to use balancing gas.

MAUI
Maui Development Limited

Major Effects

- All cost allocation assessments occur within the day.
- There is no opportunity to pay back running operational imbalance later, although it can be traded.
- Abolition of the Incentives Pool means:
 - Separate provisions for Peaking, (discussed later).
 - Separate provisions for Welded Party to Welded Party claims, (discussed last week).
- Possible changes to downstream cost allocation given no Incentive Pool charges but note that Peaking charges remain.

MAUI
Maui Development Limited

Operation

- Cost is only allocated for a day when balancing gas is used.
- If a balancing gas call has been made:
 - All the call balancing gas used on that day is summed. (A)
 - The call balancing gas price for that day is calculated.
 - The negative AEOI's for all Welded Points at the end of the day are summed. (B)
 - The negative AEOI for each Welded Point is noted. (C).
 - The cashed out quantity for each Welded Point is $A/B \cdot C$, except that it may not exceed C.
 - The Welded Party is sold the Cashed Out Quantity of gas at the call gas balancing price.
- The same applies for a balancing gas put.

MAUI
Maui Development Limited

Operational Consequences

- Note that:
 - If a Welded Party has a positive AEOL and call gas is purchased on the day, it will not be cashed out. (And vice versa).
 - A Welded Party cannot be cashed out for more than the quantity of AEOL that it has at the end of the day.
 - Title transfers at the time of cash out.
 - Cash outs are deducted from the AEOL, but any remaining AEOL transfers forward into the next day.
 - It is possible that there may not be enough AEOL in total to match the amount of balancing gas purchased. If this happens, the remainder must be allocated to the Balancing Agent who then has to sell or buy an equivalent amount of gas at some later point.

Adjustment for Intra-Day Imbalance

- There is a possibility that a Welded Party may act in a way that causes an imbalance in the middle of the day yet avoid being charged for any resulting balancing action under the normal back to back balancing rules by adjusting its position before the end of the day.
- This could result in socialisation of balancing costs that cannot be allocated to a causer.
- A mechanism for compensating for this possibility is suggested in the next slide.

Adjustment for Intra-Day Imbalance

- Calculate GJ amount of balancing gas unallocated by day end back to back calculation (G).
- Measure AEOL for each party at day end (A) and then sum (ΣA).
- Measure AEOL for each party at the balancing action decision point (B), then sum (ΣB).
- Excess intraday imbalance for each point is $C = (B - A) / (\Sigma B - \Sigma A)$, with any negative values for C set to zero.
- Additional balancing gas allocation is $C / \Sigma C * G$. This allocation is in addition to the allocation made under the normal back to back system. The total of both allocations will never exceed the amount of balancing gas purchased.

Peaking Charges

- We have concluded that a disincentive to peaking behaviour is still required.
- Our intention would be to retain the current formula used to calculate peaking debits but put a fixed price per GJ on each one.
- The current peaking limits in Schedule 7 of the MPOC would be reviewed in order to ensure that normal intra-day fluctuations are not subject to peaking charges.
- This will require some further analysis.

Tolerances

- Analysis has been done again, including data from recent months. This improves projected recoveries.
- Instead of recovery being represented as a percentage of expenditure it is now measured in terms of the expected dollars socialised over a year.
- The balancing gas prices assumed are averages of recent values, (zero cost gas excluded).
- Annual balancing gas expenditure under these assumptions is about \$8 million.
- The projections are based on historic data and therefore assume no changes in behaviour.

Effect of Different Tolerance Levels

% of Current Tolerances	% of Current OI and BG	\$ Value not Collected (000)
100%	100%	1,664
50%	100%	454
25%	100%	96
0%	100%	0
100%	50%	1,699
50%	50%	832
25%	50%	227
0%	50%	0
100%	25%	1,254
50%	25%	849
25%	25%	416
0%	25%	0

Effect of Small Tolerances

Tolerance GJ	Tolerance % of SQ	% of Current OI and BG	\$ Value not Collected (000)
1,000	1.00%	100%	100
1,000	0.00%	100%	97
500	0.50%	100%	26
500	0.00%	100%	26
0	0.00%	100%	0
1,000	1.00%	50%	214
1,000	0.00%	50%	206
500	0.50%	50%	50
500	0.00%	50%	49
0	0.00%	50%	0
1,000	1.00%	25%	290
1,000	0.00%	25%	276
500	0.50%	25%	107
500	0.00%	25%	103
0	0.00%	25%	0

Nomination Cycles

- If the timing of these is regarded as unsatisfactory there are two options:
 - Retain the same number of cycles, but change the timing. The timings were last reviewed and changed a year ago, but the process could be repeated. The cost of this is minimal, (excluding the time for those involved).
 - Add an extra cycle and review timings as above. A high level estimate for the cost of the extra cycle is \$200 to \$300k.