Working Paper – Comparison of 17 December 2009 MDL change request and draft balancing rules

This working paper provides a comparison of the features of the 17 December 2009 Maui Development Limited (MDL) Change Request (the Change Request) with those of the draft balancing rules, which Gas Industry Co is currently work-shopping with the industry. The work is preliminary but we believe it would be useful to promote discussion in order to improve our understanding of the Maui Pipeline Operating Code (MPOC) Change Request.

Note that, while the change request is intended to improve balancing arrangements, and has similar features to the draft rules, its purpose is not the same. The draft rules are Gas Industry Co's preferred means of establishing a unified balancing arrangement across all transmission pipelines; the change request only applies to the Maui pipeline.

Also note that, when Gas Industry Co analyses the change request in order to make a recommendation to MDL under section 29 of the MPOC, it will not be assessing that change request against the draft rules. Rather it will be fulfilling its role under the MPOC as set out in the Memorandum of Understanding (MoU) between Gas Industry Co and MDL. This requires it to consider whether the proposed change furthers Government objectives (as set out in the Gas Act and the April 2008 Policy Statement on Gas Governance (GPS), and not whether it is better or worse than some other solution.

However, we are interested to know how the two approaches compare, and we understand that industry participants are also interested to get a better understanding of this. It is in that context that we have developed this working paper.

We have presented the comparison in tabular form below. The rules proposed by Gas Industry Co are listed in the table with the corresponding MDL proposed changes to the MPOC. The table also has some entries that do not exactly match a single proposed rule.

Item	Proposed Rule	MPOC (with Dec 09 Change Request)	Comment
Purpose	Rule 3 The purpose statement is an objective test for approval of the balancing plan, ie unified and efficient from a market perspective.	Reasonable and Prudent Operator (RPO) is an objective obligation on parties' actions. Change control process requires Gas Industry Co (or any entity granted formal jurisdiction) support and requires MDL to be a RPO. Standard Operating Procedures (SOPs) are consulted on.	RPO is not an overall market efficiency or unity test, rather a reasonableness test from a Transmission System Owner (TSO) perspective. Under the MPOC proposal, rule development would take place in different ways each with different change processes and standards (eg MPOC, Vector Transmission Code (VTC) and SOPs). There would be little obligation to ensure the various sets of rules are efficient from a total market perspective.
Balancing gas definition	Balancing gas is all gas traded by the balancing agent to manage linepack. The allocation model defines what is allocated to Running Operational Imbalance (ROI) or mismatch, with the rest allocated to TSO operations.	'Balancing Gas' excludes gas purchased for TSO operations (eg unaccounted for gas (UFG) and compressor fuel) or cash-out of mismatch (eg contingency volume). It appears the allocation decision is made at the time of purchase.	The Gas Industry Co allocation model proposed in the draft balancing rules does not require identification of what balancing gas is being purchased for at the time of purchase and allocates this after the event based on the allocation model, with residual unallocated gas allocated to the TSO. This is an incentive for the allocation model to be efficient. The MPOC proposal appears to require balancing gas to be allocated between ROI, mismatch, or TSO operations at the time of purchase, or use some currently undefined algorithm to determine what gas traded is 'Balancing Gas'. It is unclear how this would be achieved where linepack has shifted for a combination of factors or due to the timing of transactions. There is a risk the allocation would be a judgement call where the party with the discretion has a conflict of interest in that discretion.
TSO imbalance	All balancing gas not allocated by the TSO allocation model (eg as ROI or mismatch) is settled by the balancing agent transparently with the costs passed on to the TSO. The TSO would separately purchase gas for operations and UFG.	The balancing agent separately manages pipeline operational gas (UFG, compressors, contingency etc) (3.2), although without a specific performance standard. The proposal is silent on what happens to unallocated gas or cashed out mismatch (contingency volume).	Under Gas Industry Co's proposal the consequences of the allocation model not fully allocating gas, or the TSO not managing UFG or compressor fuel, etc, is allocated to the relevant TSO. This separates the TSO role and provides an incentive for the TSO to invest in balancing its operational gas, managing UFG and, if economic, improving the allocation model (eg through investment in additional information systems). In the MPOC proposal it is unclear how balancing gas is allocated to the TSO for pipeline operational imbalance and whether this will be objective, discretionary or exempt. However there is an incentive on

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			the TSO to have costs allocated to ROI ahead of UFG or other causes of linepack movement. It is noted that Vector operational gas would not have the same status.
Obligation to balance	Rule 6 Users required to use reasonable endeavours to balance by balancing zone. The balancing zone definition must pass an efficiency test. The obligation includes the TSO for pipeline operations. Consequence of imbalance is a no-notice cash-out (the only consequence), only if there is a corresponding balancing action.	Welded parties required to use reasonable endeavours to manage ROI. Consequence of ROI is a no-notice cash-out, only if there is a corresponding balancing action, plus any allocation under the incentives pool. No obligation to manage mismatch. Consequence of mismatch is full cashout at the end of the day. No explicit obligation on the TSO to manage its contribution to balancing actions. This involves removal of the Imbalance Limit Overrun Notice (ILON) and mismatch notices plus removal of the pre-warning of cash-out price (11.6 to 11.7, 12.7 to 12.10, and 4.1). The ROI obligation replaces 'over a reasonable period of time' with 'at all times' (12.7) – seemingly a consequential of the daily cash-out.	The MPOC proposal is more fragmented in its obligations to balance and consequences for imbalance. This may create some confusion and result in different incentives for different parties. The change to no-notice cash-out would be consistent with Gas Industry Co's proposed balancing rules. However, the current MPOC has corresponding protections, by including a notification period to correct a position and prior warning of the price of failure to correct. Gas Industry Co's proposal also removes these protections but adds a corresponding tighter control on gas procurement, allocation and pricing, with the ability to hedge price risk. The MPOC proposal does not appear to give any tools to manage price risk while being unclear on the allocation. The lack of obligation to manage mismatch may be because there is little ability to do so (given the timeframe). It is noted later that the mismatch cash-out occurs regardless of any underlying balancing action or need, which could result in inefficiencies. The lack of explicit TSO obligation may also be problematic.
Subject to critical contingency	Rule 6.5 Yes.	Yes.	None.
User to provide information to balancing agent	Rule 7 General requirement to provide information (if any).	All required information is assumed to be specifically required in the MPOC.	None.

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TSO to be consistent with users balancing	Rule 8 TSO must use reasonable endeavours that contracts and procedures are consistent and do not unreasonably prevent users balancing, provided this does not unreasonably interfere with transmission services.	No explicit obligation that SOPs or actions are consistent with user obligations, or that TSOs are consistent with each other's regimes.	Under the MPOC proposal there is no explicit obligation for TSOs to balance or cooperate on balancing actions. The way the proposed clauses impact the ability of users to balance could be harder to manage, particularly with unclear obligations, and without a regime-wide market efficiency test.
TSO to provide information to balancing agent	Rule 9.1 TSO must provide necessary information to the balancing agent.	Not needed for the MDL balancing agent as MDL appoints them. No explicit obligation to provide the Vector balancing agent any information beyond normal welded party information.	The MPOC proposal contains no explicit requirement to cooperate with Vector.
TSO to provide a balancing gas Transmission System Agreements (TSAs)	Rule 10 TSOs obtain access to other TSO systems for balancing gas. Nominations gain priority to unallocated capacity (eg subject to an approved nomination). Balancing TSAs are transparent.	MDL balancing agent is provided a TSA (3.4) referenced to the Payback Point. Vector balancing agent access to the Maui pipeline would presumably rely on a standard TSA and the obligation (2.6) to provide this. Removes the priority for Vector balancing gas to uncommitted capacity (deleted 8.23(a), 8.25(a)). Removes the certainty on any approved nomination (8.27(a) and (b)) (this is more general than just balancing gas). Removes Vectors post intra-day cycle balancing gas nominations (deleted 8.17, 8.1(c)(ii), 8.6, 9.10).	Under the MPOC proposal Vector would lose balancing gas rights. It appears Vector would use a standard TSA and balancing gas can be bumped on an intra-day cycle (this is a change for all Shippers where approved nominations could no longer be relied on – see later comment) and a nomination cannot be added ex-post. This could constrain the efficiency of any Vector balancing market. There is potential for the balancing TSAs to have fixed capacity costs, which could be substantial given balancing is volatile, even though generally a balancing transaction is supporting transmission services and reserved capacity.
TSO to cooperate and	Rule 11.1	No explicit obligation to cooperate	The MPOC proposal appears to have fewer checks in place to ensure

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minimise balancing	TSOs must cooperate with the balancing agent with a view to minimise balancing costs (subject to maintaining transmission service – rule 8.2)). TSOs must make compressor operation transparent.	with the balancing agent or minimise balancing actions, although the RPO obligation may give some comfort. Publish SOPs and operator instructions (2.18).	efficient balancing behaviours relative to Gas Industry Co's proposed rules. A user may be able to challenge behaviour with the RPO obligation although this is significantly weaker than a direct obligation. The requirement to consult on SOPs helps but does not ensure an efficient outcome.
Balancing Agent role	Rule 13 Manage linepack with balancing gas and allocate balancing gas and costs according to the allocation model. TSO to provide the allocation model and manage UFG and operational gas.	Manage linepack, UFG and operational gas, and allocate gas and costs (3.1, 3.2).	Under Gas Industry Co's proposal, the balancing agent has a clear role limited to buying gas on thresholds and allocating balancing gas based on a defined model. The TSO has a clear role to provide an efficient allocation model and manage gas not fully allocated or gas used for pipeline operations (eg UFG, unallocated gas, operational gas etc). Under the MPOC proposal the Maui balancing agent manages various functions and must determine what trading is for TSO operations, UFG and contingency volume. The boundaries between these functions appear to be unclear and could create significant confusion.
Independence of the balancing agent	Rule 14 Independent, arms length and ring-fence information.	Arms length and ring-fence (3.5(a)(iii), sch 4).	None.
Management of linepack	Rule 15 Reasonable endeavours to manage to defined thresholds by trading gas. Procure no more balancing gas than needed. Any other activities to be identified in the balancing plan.	Balancing agent to use all reasonable endeavours to manage linepack by trading gas (3.1, 3.5) including separately for pipeline operations (3.2) such as UFG, contingency volume and compressor fuel. Any other activities identified in an SOP (3.2(d)).	Both proposals have obligations to provide residual balancing services. However, unlike Gas Industry Co's proposed rules, the MPOC proposal has additional roles and does not define the thresholds. This may allow over-correction (eg to a midpoint or to match ROI) and does not provide a mechanism to test if the process is efficient or for a user to challenge whether the SOP or balancing agent is being reasonable. Any over-purchase (eg from not fully utilising the linepack flexibility) or blurring of actions between operations and users will reduce overall market efficiency.
Balancing market	Rules 16.1 & 16.3	Implicit that there is only one market	The MPOC proposal has Vector operating separate balancing

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rules	Requires single balancing market.	on the Maui pipeline.	market(s) or potentially relying on the Maui market through cashout.
			It may be necessary for Vector to have one market per Maui welded point (or use some sort of displaced gas nominations).
			Vector use of the Maui pipeline may have nominations bumped and is subject to intra-day nomination cycles, ie the balancing markets could have different levels of openness.
	Rule 16.2 Market to be open, subject to technical requirements and reasonable terms.	No corresponding obligation.	The MPOC proposal does not state how a Vector connected party can participate, therefore reducing the efficiency of the balancing market. Gas Industry Co's proposal would provide for openness subject to a reasonableness and a market efficiency test (with a forum to challenge the mechanism).
	Rules 16.4 & 16.5 Close late. Buy lowest and sell highest priced bids. Marginally cleared. Reference location to be identified in the balancing plan as a balancing zone or a specific	No obligation to close late. Average the total put or call gas for a day (see definition of Mean Call Price and Mean Put Price). Least cost basis (3.5(a)(i)). Clearing location is the Payback Point (3.5(a)(ii)).	The MPOC proposal has no certainty that the market closes 'on-the-day' and will include as much capacity as possible (and not unnecessarily ties up capacity). There appears to be little protection against balancing market changes reducing overall efficiency. A potential drafting issue is the obligation to sell at least cost (ie this may not equate to maximising revenue). The lack of marginal pricing is discussed below under 'price signals'.
	point. Rule 16.6 Cap and floor to cash-out price, which is against a standard with consultation.	Interpretation section (1.2) clarifies that prices can be negative. Any cap or floor would presumably be in an SOP.	The MPOC proposal does not state what cap or floor is on the prices and relies on an SOP resulting in greater uncertainty.
Outside market rules	Rule 17 Provides governance if the market is not working.	Little definition of the actual market. MDL may change the market at its discretion.	See comments on rule 16.4. MDL could change the market over time without a material governance or market efficiency test.
Terms of Balancing Gas trading	Rule 18 Trading terms are published and	As RPO, required to publish terms (3.5(a)(b), 3.5(d)(i)).	There is a risk the MPOC RPO obligation is just to publish rather than on what the terms actually contain. Therefore there is a risk that the terms are unreasonable. There is no assurance that the terms for

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	must be consistent with an open market and reasonable commercial practice.		participation will be as open as practical.
Allocation model	Rule 19 The balancing agent allocates in accordance with the allocation model in the balancing plan (which must be proportionate to cause). The allocation model is subject to a market efficiency test by an independent party. Allocation must be timely and using best information, subject to not requiring unreasonable expenditure on providing/obtaining information. The costs of unallocated gas are passed to the relevant TSO giving the incentive to ensure the allocation model is efficient.	At the end of each day, cash-out all the 'Balancing Gas' quantity for the day (capped at total contributing ROI), pro-rated between contributing ROI (12). Note: the definition of 'Balancing Gas' excludes gas purchased for TSO imbalance and mismatch. Any unallocated Balancing Gas can have its cost claimed from the incentives pool (which is capped). There is a potential drafting issue with the definition of Cash Out Quantity, ie potentially ambiguous whether a user must have contributing ROI over the whole day, or the sum of hourly ROI or the end of day ROI. Deletes tolerances on ROI and ILON process (old 12.6, 12.8, 12.10). Mismatch Period is deleted and all mismatch is cashed out at the end of the day regardless of any balancing action (at a price that reflects costs).	Under the MPOC proposal the model for determining 'Balancing Gas' is not clear. For instance, could it include elements of managing imbalance from TSO operations or mismatch/contingency? It is possible that the timing of UFG tenders and release of Contingency Volume will create significant issues with allocation resulting in significant amounts of UFG. There could be discretion on the operator with conflicted interests. Any call balancing gas not allocated in the cash-out can have its cost claimed from the incentives pool (while retaining the actual gas), to a cap. The proposal is silent on what happens to balancing gas that is not able to be allocated and is then impacting future balancing actions, and what happens to the revenue from its future sale. Mismatch is all cashed out at the end of each day with little ability to repay in kind and little definition of how the cash-out gas would be recovered (ie presumably this may not be allocating any actual balancing gas, rather creating a need to buy call gas in the future and potentially distorting future balancing actions). Also see comments on back-to-back and mismatch below.
Notification of allocation	Rule 20 Notify allocations and prices as soon as practical. Prices adjusted for transmission costs from clearing location, if any.	Notify ROI and cash-out quantities the following day (4.1). No adjustment for transmission costs.	None.

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Payment	Rules 21 & 22 Pay cost allocation to balancing agent monthly. Pay when paid for call gas (must pursue debts).	Pay cost allocation to MDL monthly (19.2-19.4, 21.2). Change to a 'pay now and dispute later' regime (21.11).	Under Gas Industry Co's proposal the risk of non-payment by a put gas provider falls on the cashed-out party (the party creating the imbalance and the need for that put gas). The risk of non-payment for a sale cash-out is left for the TSOs to determine, although there is room for this to be on the call gas provider. The MPOC proposed changes have no 'paid when paid' right for Vector so the shift in risk for cost recovery moves from MDL to Vector. There is no particular market efficiency issue with this although it does not resolve the tension between the TSOs. It is noted the 'pay now dispute later' clause is for all invoices and not just balancing.
Unallocated gas	Rule 23 The balancing agent settles any unallocated gas with an obligation to minimise losses or maximise gains. The costs or revenues go to the TSO for its tariff.	MDL claims for its cost on the Incentives Pool (14) and then any residual cost (with no mention of revenue) is added to tariff 3 (schedule 10). Otherwise silent on how the actual gas is dealt with.	Under the MPOC proposal it appears the balancing agent could receive from the incentives pool the entire 'Mean Call Price' and also retain title to excess gas, rather than the difference between the Mean Call Price and the price for which they actually later sell the gas (realising other claimants to the Incentives Pool would get the difference between a proxy for 'call' and 'put' price). However the balancing agent may not get the Mean Call Price due to the cap. There appears no commitment on how and when the balancing agent sells this surplus gas. The tariff principles only refer to costs so potentially any benefit is not transferred to the general tariff.
Records and transparency of allocations	Rule 24 The balancing agent is to keep records and publish information by balancing action (but not at transaction level) and the settlement of unallocated gas.	MDL will publish details of all transactions for pipeline operations and balancing gas (3.3, 3.5(a)(iv)). This includes price stacks and real time metering (3.5(d)).	The MPOC proposal appears to be more transparent than Gas Industry Co's proposed rules. Under the proposed balancing rules the clearing price would be published, not each offer price.
Errors	Rule 25 Material errors adjusted in a timely manner, but only if notified within six months.	Errors in cash out quantities are not corrected (12.5), even if using unvalidated metering data.	The MPOC proposal is significantly different. Further, it is unclear why MDL un-validated metering data would not be corrected when validated a day or two later. The MPOC proposal does not seem to correct for manifest error or fraud.

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Reporting	Rule 26 Monthly report to Gas Industry Co including breaches (Gas Industry Co decides what is published).	Monthly report on expenditure and income along with recovery of costs (3.5(d)(v)).	The MDL monthly report process is similar to the one proposed in the draft rules but it is less specific and does not include breaches of the code.
Appointment of balancing agent	Rule 28 & 29 TSOs jointly appoint balancing agent (28). Best endeavours to maintain balancing agent cover. Terms of balancing agent appointment transparent (29.2). Only one balancing agent (29.3).	MDL will appoint a balancing agent (3.1).	Under the MPOC proposal each TSO has its own balancing agent. The terms of their appointment may not be transparent. See 'unified regime' comments below.
Setting balancing plan	Rules 28 - 32 TSOs jointly agree balancing plan (28) which must meet the purpose (unified and efficient) (30). Formal defined consultation process (31-32). Gas Industry Co approves the plan against the purpose (30).	Balancing plan spread between codes and SOPs. SOPs consulted on.	Under the MPOC proposal, some of the plan is approved by Gas Industry Co and some is consulted on without any objective test (eg part of the rules could be inconsistent with efficiency criteria). In addition different parts of the overall regime rules are being consulted on and developed at different times and in different forums. See 'unified regime' comments below.
Requirements of balancing plan	Rule 33 Balancing plan published. Schedule outlines requirements for detail of balancing plan. Identify balancing agent for appointment. Define balancing regime (zones, any pressure control, thresholds	Information provision and transparency is covered in section 4 and includes all written instructions. Tolerances are removed except for incentives pool liability. Publish instructions to operators (4.1) and consult on SOPs (2.18). Publish process for balancing market	Under the MPOC proposal the 'balancing plan' is spread over the MPOC, VTC and various SOPs. The Maui part of the balancing plan is embedded in the MPOC (determined now) and also in SOPs (at MDL discretion). The thresholds are not defined and there is no obligation to maximise use of the inherent linepack flexibility. There is likely to be an SOP covering this, although influence on this would be limited to consultation and RPO obligations. There is no objective test for price caps on purchasing balancing gas

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	etc). Maximise linepack flexibility and define it (ie threshold gap). Define coordination and provision of information. Define procurement processes (times, decisions, caps etc). Price cap objective test. Allocation model which must be in proportion to cause (although information provided is limited to what can be obtained without unreasonable expense – 9.2).	(3.5(a)(iv)).	(there may be no cap or floor). There is a general obligation for transparency over instructions and consultation on SOPs, which should ensure a level of transparency over the MDL regime. However it is without a formal process, is not necessarily in a single document, and is not required to align with Vector's regime. The process for the balancing market must be published but may not be subject to consultation. There is no independent approval or test against the purpose. The overall balancing plan is not in one place and is not considered at one time.
Amendment	Rules 34-38 Formal defined process (rule 34 to 38). Amendments must be agreed by TSOs or submitted by Gas Industry Co. Temporary minor or urgent changes allowed (rule 34.4).	Consultation on Maui SOPs (2.18). Change to MPOC requires Gas Industry Co approval (29.4) (process unchanged). Add that a change request may have expiring transition provisions.	Under the MPOC proposal the change process for the MPOC is not significantly changed. There is a requirement to consult on SOPs however the change process for SOPs or gas procurement terms requires no independent approvals and is not measured against market efficiency criteria. The change processes for VTC, MPOC and SOPs remains disparate.
Dead lock breaking mechanism	Part 2 Gas Industry Co breaks TSO balancing plan agreement deadlock by developing plan and appointing balancing agent.	MDL remains separate and only addresses Maui pipeline.	A key issue is the ability of the final option to break the deadlock and allow the industry to move forward and focus on a single solution.
Funding	Rules 52 to 57 TSOs can agree the balancing agents funding at the time of appointment. If Gas Industry Co appoints then these costs go to TSOs in	MDL appointed balancing agent will set tariff 3 and invoice shippers (3.2(c)). Tariff 3 will include unrecovered gas costs (schedule 10). The non-allocated balancing cost	Similar outcome between proposals for fixed costs, although the components in the costs may be different. However there is no explicit credit for revenue from unallocated call gas in the residual balancing gas (maybe a drafting omission). By moving to a monthly tariff on cash flow, the tariff (which in essence reflects the cost of security of supply) could be volatile and

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	proportion to throughput.	(called 'Other Balancing Costs') is set monthly, on a cash flow basis.	not reflect the actual month's costs rather the previous month's costs.
Audit	Rules 58 to 64 Gas Industry Co right to audit balancing agent (TSO can audit if they appoint the balancing agent). Details on audit scope and independence are defined. Audit to be published, other than confidential information.	MDL will independently audit balancing agent accounts annually and publish the reports.	The MPOC proposed audit is only of expenditure and income accounts and not compliance with the MPOC (or on the setting of tariff 3). Gas Industry Co's proposed audit is an independent audit on compliance and processes as well as accounts.
Safety	Rule 68 - Safety has priority		None.
Relationship to codes	Rule 69 Codes are subject to rules. No double jeopardy.	n/a	None.
Critical contingency	Rule 70 The balancing agent must cease to manage linepack on part of transmission system affected by event. The rules are subject to critical contingency regulations. Rule 6.5 The obligation to balance is relieved during a critical contingency (for the impacted balancing zone).	Critical contingencies are included in the definition of a Force Majeure (FM) event. This means all parties are relieved of liability to the extent the event causes a failure by that party to perform an obligation.	Under the MPOC proposal MDL will need to call FM for critical contingencies on any obligations they cannot perform. They must perform obligations they can perform, which could include buying balancing gas, therefore the outcome is slightly different from the proposed Gas Industry Co rules.
General comments (no	t relating to a specific Gas Industry Co	proposed rule)	
Unified balancing regime	One balancing agent appointed jointly by the TSOs. One unified balancing plan	Each TSO has its own balancing agent and balancing market (or potentially one market per pipeline system?). The 'balancing plan' is spread between	Under the MPOC proposal the 'balancing plan' is essentially fragmented between various locations, each with different change processes and different standards. In addition the Maui balancing market may not be open to Vector connected providers and there is

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	reviewed at one time. One change control process and forum. One open balancing market. A deadlock breaking mechanism to ensure the industry moves forward (ie Gas Industry Co steps in).	the MPOC, VTC and SOPs. Amendment to 2.15 appears to remove the nexus for Vector to ensure parties shipping into Vector system have signed the VTC.	no requirement that the TSOs cooperate other than through their respective RPO obligations ¹ . Therefore there is potential to have disparate and/or duplicate systems, multiple balancing markets, unclear roles and reduced market efficiency. The proposal does not appear to address the current Vector/ MDL difference of opinion on roles and responsibilities. The amendment to 2.15 seems to remove a mechanism to ensure alignment.
Back-to-back (cost to causers)	Gas Industry Co's proposal requires back-to-back allocation subject to reasonableness for information. The exact model is not defined and the overall market model would be tested against these principles and market efficiency.	The MPOC proposal is to cash out ROI to match gas determined as 'Balancing Gas', at the end of each day. The separation of TSO operations, UFG and contingency volume, plus the handling of unallocated gas creates uncertainty that this cash-out will be due to ROI or sufficient.	Gas Industry Co's proposal requires the TSOs to jointly present an agreed system wide model at one time, using back-to-back principles, and enforces this through the approval process. There is an incentive for each TSO to manage its operational gas and if needed to invest in information systems to improve the allocation model and reduce unallocated costs. The result is likely to be a less than perfect back-to-back allocation, but close to the economically efficient point (given transaction costs).
	In practice it is expected the initial model will be practically limited to the end of day imbalance plus some sort of peaking mechanism. However the end of day cashouts would be per balancing action.	The proposal allows for costs to be claimed through the incentives pool for any call gas not cashed out, yet still retain ownership and potentially retain the gas in the pipeline as well. The proposal is silent on how this impacts future transactions.	The MPOC proposal goes some way to improving back-to-back allocation but not as well as the proposed rules. There is some ambiguity, discretion and potentially perverse incentives. There are also anomalies between the incentives pool and mismatch. This could deter from the cost to causer objective. It is not clear that TSO operations will be included equally in the process.
	Any unallocated costs are passed to the relevant TSO (to be socialised into tariffs). These are expected to be small due to the structure of the proposal.	The mismatch cash-out process is not 'back-to-back'. If MDL releases contingency gas and creates shipper mismatch, this mismatch is nearly immediately cashed up regardless of any underlying balancing action. The	

¹ The RPO obligation is from the TSO perspective and is not an overall market efficiency test, so may not help ensure the various rules work well together.

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		proposal is silent on how this impacts the other balancing actions.	
Price signals	Gas Industry Co's proposal has marginal pricing of balancing gas, with a single price for the entire market that reflects the opportunity cost of gas at the time of the balancing action (with locational correction if relevant). There may be several prices in a day for each balancing action. Fixed costs of balancing and any unallocated gas settlement would end up in the tariff.	Under the MPOC proposal there are multiple prices. In the Maui market there is an average daily price for welded parties (ROI cash-out), different offer prices for each gas provider, a different price for mismatch and no defined price for TSO imbalance or unallocated gas. There may be more prices in the Vector balancing market. The as yet undefined mechanism for unallocated gas, UFG, TSO operations and contingency gas may distort balancing actions, diluting price signals between days. It appears the price MDL receives for unallocated call gas could be both a claim on the incentives pool and later sale of the gas. For welded parties with negative imbalance, they can be cashed out at the average day's price and also receive a cost through the incentives pool.	The MPOC proposal may not result in pure pricing signals to the market and further will not enable hedging of price risk (through participation in the market). It also adds to the amount of complexity for a user (and potentially for the operators). Therefore it can be expected the MPOC proposal would have lower efficiency than Gas Industry Co's proposal.
Mismatch and contingency volume		Remove the ability to trade out of mismatch. Move the nomination of mismatch from 8.1 to 11.5.	Essentially gas released from the contingency volume under MPOC section 15 can become mismatch, however under the MPOC proposal the Shipper would have to nominate out of this during the same day or be cashed out at the end of the day, regardless of
		Automatic cash-out of mismatch at the end of the day (11.6, 15.9) at a price that reflects the costs of	whether there is an underlying gas transaction or need. Given the contingency volume is relatively large and repayment may be impossible for the Shipper within a part day, this essentially

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		accessing and disposing of gas (11.7) (not clear if the costs are of that gas or any gas). Deletion of the undertaking that MDL will not seek to make a profit or loss from cash out (11.7).	means a potential forcible sale from MDL to the shipper during a contingency. The governance on use of mismatch and setting of price seems relatively weak for the sums of money involved. It would be good for MDL to explain why they have removed the obligation to not seek a profit or loss from balancing gas (potentially considered redundant). Note that the handling of mismatch and contingency volume may also compound the blurring of lines between what is balancing gas and operational gas and reducing the back-to-back nature of the regime. For example, potentially the balancing agent releases contingency volume putting Shippers into negative mismatch, forcibly sells gas to the Shippers through cash-out (without actually buying any physical gas on the day), then buys call gas with a corresponding cash-out of welded parties, and then claims on the incentives pool against these same welded parties.
Tolerances	Allowance for tolerances but not obligated.	No tolerance on imbalance cash-out. Some tolerance on incentives pool liability.	No specific issue identified as Gas Industry Co's proposal allowed removal of tolerances (assuming back-to-back allocation). However this is potentially problematic if the Maui balancing agent fails to maximise linepack flexibility, such as correcting linepack to a middle point or matching balancing gas actions to ROI.
Peaking		Reduce the tolerance by removing the minimum quantity and obligation to maximise it (13.1), including making it zero after the issue of an Operational Flow Order (OFO). Change to hourly peaking limits (13.2).	The peaking limit does not apply to cash-out and only incentives pool claims. This potentially dilutes the back-to-back (cost-to-causers) nature of allocations a little, as any peaking contribution relies on insufficient end of day ROI to be included in the incentives and is not included as a cash-out but rather as a cost. See comments on 'incentives pool'. The removal of FM etc should be explained by MDL and analysed
		Change some provisions in 3.2. Remove the FM, contingency and maintenance relief from peaking limits	further.

Item	Proposed Rule	MPOC (with Dec 09 Change Request)	Comment
		(13.4, 18.13).	
ROI		Now defined as hourly.	Not clear why ROI is defined hourly while cash-out quantity is defined for a day and the cash out is at the end of the day.
			(Further investigation on the definition of Hourly Scheduled Quantity (HSQ) and how this impacts the new definition of ROI and cash out quantity required)).
New tariff		New tariff 3 unbundles balancing costs.	Presumably a positive outcome.
UFG definition		New definition of UFG with UFG and operational gas defined separately.	New definition of UFG is general. This creates a risk around what is included in it. Gas Industry Co's proposed rules do not require UFG to be defined and separated. See comments on 'definition of balancing gas' and 'TSO imbalance' above.
Termination		Introduce immediate cash-out if Interconnection Agreement (ICA) terminated (12.10), at mismatch price in 11.7.	This is a small change that does not really significantly impact balancing.
Incentives pool		Tolerances are reduced and only apply to incentive pool debits, which are incurred for negative ROI or peaking over tolerance (seemingly prior to any cash-out). Claims are from parties that cannot off-take scheduled quantities (12.11), and the balancing agent for the averaged call price where there is insufficient cash-out for call balancing gas in the day (capped at the incentive pool price) (14.6). Adds clarity that if incentive pool claims exceed debits then pro-rate claims (12.11, 14.2). Note, parties lose protection on	The incentives pool remains a negative imbalance claims regime (largely unchanged). With the new cash-out regime there is potential for a cash-out and then a cash liability through the incentives pool as well, due to there being insufficient cash-out quantity for the balancing gas on the day (ie the cash-out does not appear to be removed prior to calculating incentive pool debits). Under the proposed regime there is potential that the excess balancing gas is not due to the ROI on the day but balancing agent discretion, past unallocated gas, UFG etc. MDL may claim the full cost of call gas but also retaining title (see comment under 'unallocated gas', rule 23, above).

Item	Proposed Rule	MPOC (with Dec 09 Change Request)	Comment
		peaking limit if curtailed by a contingent event or maintenance.	
Expert dispute		Remove expert disputes.	
Approved nominations		Remove the certainty of Approved Nominations in the intra-day cycle (8.27).	This is not directly a balancing issue but has significant balancing implications and is a fundamental shift in the nature of intra-day cycles. The MDL regime currently has Approved Nominations unable to be bumped during intra-day cycles, other than for a contingency. This means participation in intra-day cycles is non-compulsory as Approved Nominations can be relied on. The proposal has intra-day nominations from Shippers with spare Actual Quantity (AQ) bumping approved nominations of Shippers without AQ, meaning approval of nominations cannot be relied on.
Various		Drafting changes on trading hub, notional welded points and physical welded points etc.	None.
Legacy		Various deletions of legacy provisions.	None.