

Issues and Indicative Options for the Spot Market Pricing Process and UTS Provisions – Summary of Submissions

Questions regarding the conceptual framework

Question 1: Do you agree the desirable attributes of generic pricing processes are timeliness, predictability, authoritativeness, accuracy, robustness, simplicity and transparency? If not, why not, and what other attributes would you suggest? Do you agree with the definitions of these attributes?

Row No.	Agree/ Disagree/ Unclear	Stakeholder	Comment
1	Unclear	Contact	<p>Nodal pricing is complicated and understood by few. A benefit is supposedly economic efficiency, but the sophistication of SPD means that it is difficult for participants to get an intuitive feel about how prices are calculated and what the resulting risks are. The short duration of such risks (e.g. “Spring Washers” or loop constraints) makes it difficult to foresee these prices and equally difficult to hedge the associated risk. These prices appear to be driven more by the laws of mathematics rather than the laws of economics.</p> <p>The key purpose of price accuracy is to reflect the marginal cost of supply. Spring Washers were a HILP risk, however, as the Grid has become more constrained at 110kV we consider that Spring Washers are now more likely.</p> <p>A large part of this issue could be resolved by capping prices at the loss adjusted equivalent of the highest cleared generation offer. We wonder what the economic rationale is for having a price that is five times greater than the highest cleared offer? This sort of cap creates price certainty and would allow hedges to be traded at nodes that are plagued by Spring Washer constraints.</p> <p>We are puzzled about how robustness has been used as an attribute because the discussion paper does not appear to use it in table 1 on page 41 to distinguish between the various spot market initiatives. Can this be clarified?</p>
2	Agree	Genesis	Genesis Energy agrees that the attributes, as defined, provide a useful way of thinking about generic pricing processes.
3	Agree	Meridian	Yes, Meridian agrees with the use of these attributes and supports their definition. In Meridian’s view accuracy is the most important of the attributes.
4	Agree	Mighty River Power	Accuracy and predictability are the most important attributes to Mighty River Power.
5	Agree	Todd Energy	Yes.
6	Unclear	Transpower	<ul style="list-style-type: none"> • Robustness and authoritativeness should be taken as a given in any pricing process. • The key issue is the trade-off between price certainty and price accuracy. • The purpose of accuracy is to reflect the marginal cost. • There does not appear to be any recognition of risk in the framework – that is, depending on which attributes are emphasised as more or less important, the risk falls in a different place. <p>[Clarification on the last bullet point was provided by Transpower, as follows:] [Transpower] was simply highlighting that different parties will be assuming more or less risk depending on where the emphasis is placed within the framework. We’re not sure that it’s necessary in the wider scheme of things to carry out a more detailed level of analysis of the risks.</p>

Question 2: Do you agree with the above framework (including the framework in Appendix B) for assessing alternative approaches to pricing processes? If not, why not, and what framework would you recommend?

Row No.	Agree/ Disagree/ Unclear	Stakeholder	Comment
7	Agree	Contact	As the EC has pointed out, there are a number of initiatives underway which could have a major effect on the value of these proposals concerning how spot price is determined and how errors and problems should be dealt with. It will therefore be vital to weigh up the approaches that will bring the greatest benefits to delivering electricity reliably and efficiently. These need to be prioritised to ensure that work is not wasted on areas that could be addressed or overtaken by other initiatives. Now to the suggested framework for assessing options for improving spot market price formation. It seems a logical approach in theory but actually estimating the marginal costs and benefits is likely to be very challenging to a point where it may just come down to beliefs about costs and benefits and the tradeoffs between attributes. However, in so far as it is possible to numerate the costs and benefits of the attributes, it may help inform the debate.
8	Agree	Genesis	Genesis Energy agrees that the framework is useful at a conceptual level. Limitations on data, input assumptions, and on the model itself usually mean that a deterministic assessment framework cannot guide decisions alone. In practice, decision makers need to supplement deterministic assessment frameworks with judgement informed by consultation, advice, and their own experience.
9	Agree	Meridian	Meridian supports the Commission's framework but queries whether or not the level of effort undertaken by the Commission is justified by the problem definition. That is, given that the Commission has acknowledged that the UTS and pricing process is working well, Meridian queries the importance of this work in the Commission's priority list.
10	Agree	Mighty River Power	This framework provides a reasonable base but should not supplant reasonable judgement and consultation.
11	Agree	Todd Energy	Yes.

Question 3: Do you agree with the above principles? If not, please explain why and propose alternative principles.

Row No.	Agree/ Disagree / Unclear	Stakeholder	Comment
12	Agree	Contact	We agree with the tenor of the principles the EC has outlined. Settling prices efficiently in a way that maximizes competition in the wholesale market is the best approach in Contact's view.
13	Agree	Genesis	Yes. Genesis Energy understands the term "pricing process" to include the UTS mechanism (and any other mechanisms for dealing with extraordinary pricing situations). If the Commission understands the term to exclude such mechanisms, then the fourth principle should be

Row No.	Agree/ Disagree / Unclear	Stakeholder	Comment
			relaxed so it does not apply to "...all possible pricing situations".
14	Agree	Meridian	Yes, Meridian agrees with the principles outlined by the Commission.
15	Agree	Mighty River Power	Agree.
16	Agree	Todd Energy	Yes.

Question 4: Do you agree that robustness and authoritativeness are critical attributes for the electricity spot market pricing process? Do you agree with the relative importance given to the other attributes? If not, which attributes do you consider to be the most important and why?

Row No.	Agree/ Disagree/ Unclear	Stakeholder	Comment
17	Agree	Contact	We agree that the spot market pricing process must be credible. This implies that rules cannot be gamed, which the EC seems to see as robustness, and that prices are authoritative.
18	Agree	Genesis	Genesis Energy agrees that robustness and authoritativeness are key attributes, but considers that timeliness, accuracy and transparency are also important. Simplicity is a difficult attribute to pursue given the inherent complexity of the electricity spot market. However, it is important nonetheless. Complexity and lack of transparency can deter participation in the market, to the detriment of competition.
19	Agree	Meridian	Yes. Meridian agrees that robustness and authoritativeness are critical attributes for the electricity spot market processes. With regards to the other attributes identified by the Commission, Meridian submits that accuracy should be the Commission's most important attribute. Meridian notes that a small change in inputs can have a significant effect on prices. That is, the quality of the inputs into the process are critical to achieving quality outputs.
20	Agree	Mighty River Power	Agree. However, if the level of accuracy is not high enough authoritativeness and robustness will be undermined.
21	Agree	Todd Energy	Yes.

Question 5: Do you agree with the above decision criteria? If not, please explain why and propose alternative criteria.

Row No.	Agree/ Disagree/ Unclear	Stakeholder	Comment
22	Agree	Contact	The approach of picking the option that has the highest score while being credible seems reasonable. We are

Row No.	Agree/ Disagree/ Unclear	Stakeholder	Comment
			puzzled as to what attributes participants are able to pursue themselves? As 4.10.1 (a) states “Larger weights should be given to attributes participants are unable to pursue themselves, such as accuracy”. With regard to the EC’s question in 3.9.9 concerning participants’ views about why the day-ahead market was not used in 1996, and whether those reasons are likely to remain today. It is Contact’s understanding that in those days the market power of the ECNZ meant that it had was no incentive to sell at any cheaper in the day-ahead market than it did in the real-time spot market. This made the day-ahead market irrelevant. While this situation would likely not be so now and a day-ahead market might provide price certainty for the volume covered in the day ahead, Contact agrees with the EC’s conclusion that participants are currently able to negotiate hedge contracts amongst themselves to achieve greater price certainty. Therefore we consider that there should be a focus on ways to improve the existing and proven hedge market rather than wasting resources on investigating a day-ahead market, especially given the uncertainty from the ongoing Market Design Review and the Commerce Commission’s Part 2 Commerce Act investigation.
23	Agree	Genesis	Yes.
24	Agree	Meridian	Yes, Meridian agrees with the decision criteria identified by the Commission.
25	Agree	Mighty River Power	Yes.
26	Agree	Todd Energy	Yes.

Questions regarding settlement on 5 minute pricing

Question 6: Are there any other implementation issues that would be associated with the introduction of settlement on 5 minute pricing?

Row No.	Agree/ Disagree/ Unclear	Stakeholder	Comment
27	N/A	Contact	The key implementation issues appear to have been covered in the consultation paper.
28	N/A	Genesis	Accuracy of Demand Estimates Genesis Energy’s biggest concern with settlement on five-minute prices is the inaccuracy of SCADA-based demand estimates. In particular, using allocation factors to break demand down to bus level is a major source of inaccuracy in the five-minute indicator prices. Significant improvement to five-minute demand estimations would be a prerequisite for Genesis Energy’s support of settlement on five-minute pricing. For the ‘settlement on next-day five minute prices’ option, this could be achieved by bringing forward the roll-out of GXP metering that achieves a five minute interval standard. Genesis Energy recommends that the Commission should keep this option alive at this stage, rather than deferring to EMS’s existing meter renewal plans. Potentially, an alternative approach would be to combine a more gradual transition to improved GXP meters with

Row No.	Agree/ Disagree/ Unclear	Stakeholder	Comment
			<p>interim enhancements to SCADA-based demand estimates (i.e., using more accurate allocation factors).</p> <p>Five-Minute Demand Forecasts</p> <p>The two-hour gate closure rule means that even with settlement on five-minute prices, high-stakes supply-side trading decisions would remain based on forecast prices that use forecast half hour demand averages. Similarly, dispatch (SPDQ) would remain based on forecast half-hour demand averages.</p> <p>For consistency, a move to forecast prices based on five-minute demand forecasts should accompany any move to settlement on five-minute prices.</p>
29	N/A	M-co	<p>M-co broadly agrees with the overall approach outlined in the paper, but holds that settlement on next day 5 minute prices will produce results more reflective of actual supply, demand and transmission conditions as opposed to the other options. With regard to the type of five minute pricing, M-co is of the view that it is essential the existing process of resolving infeasibilities be maintained. Ignoring infeasibilities and taking an average of the noninfeasible surrounding periods runs the risk of diluting price signals, particularly at times when the grid is constrained. It is also clear that most participants prefer a certain amount of time to review prices, particularly when there are major issues.</p>
30	N/A	Meridian	<p>Yes. Meridian expects that a move to five minute pricing would impose a number of additional costs that do not appear to have been factored into the Commission's analysis.</p> <p>For instance, Meridian expects there will be substantial costs involved in upgrading half hour meters to provide five minute prices. Further additional costs that need to be factored in include the cost of upgrading generator software to adapt to five minute settlement. These would include database changes, application changes, billing and settlement changes and so forth. Changes to existing contracts (for example, financial contracts), may also be required and will also add to increased costs.</p> <p>Meridian also submits that there would need to be improvements in SCADA accuracy if SCADA values were to be used to set prices.</p> <p>Meridian considers that the Commission's current cost benefit analysis is incomplete and recommends that a full cost benefit assessment be made before proceeding any further with this proposal.</p>
31	N/A	Mighty River Power	<p>While 5 minute settlement would in principle be desirable our view is that the benefits do not outweigh the costs.</p>
32	N/A	Transpower	<p>Transpower is concerned that the use of SCADA data to measure load raises questions of fitness for purpose and availability. Even if SCADA data were available on a 5 minute basis, the information was not designed to meet the standards required by meter revenue data. In fact, the new Technical Code C requirements (implemented in late 2006) have further reduced both the accuracy and availability standards compared to previous versions. In Transpower's view, these rules would require substantial amendment before SCADA data could be used as the load input for final pricing.</p> <p>Currently, there is only a "best endeavours" requirement on 5 minute indicator prices, but this proposal would place far more importance on these.</p> <p>If new metering were installed, it is possible that near real time 5 minute data could be made available for pricing. However, this would create the need for continuous monitoring of data availability and quality.</p>

Question 7: Do you agree with the Commission's assessment of settlement on 5 minute prices? If not, why not? Please explain any other benefits, or costs, which you have identified.

Row No.	Agree/ Disagree/ Unclear	Stakeholder	Comment
33	Agree	Contact	The analysis of the option appears to cover the various issues well. As discussed in the consultation document, other initiatives, such as allowing the demand side to dispatch, could impact on the value of this initiative.
34	Unclear	Genesis	<p>Ex Ante Five-Minute Prices Forecast demand would be considerably less accurate than the metered demand data currently used for settlement prices, so ex ante prices would reduce pricing accuracy. Increases in wind generation capacity would further reduce the accuracy of ex ante pricing over time. Ex ante pricing would increase constrained-on and constrained-off payments. These cannot be determined ex ante, so ex ante pricing would not necessarily deliver meaningful improvements in certainty for purchasers.</p> <p>Ex Post Five-Minute Prices Ex post five-minute pricing would reduce constrained-on and constrained-off payments and improve pricing certainty. However, it wouldn't be possible to maintain input data quality at current standards so pricing accuracy would reduce. Lack of time to gather and cleanse data, lack of time to deal with modelling issues, and differences between forecasting and pricing methodologies mean that ex ante five-minute pricing could reduce predictability (and hence certainty).</p> <p>Next Day Five-Minute Prices Genesis Energy considers that this approach, combined with five-minute indicator prices, is the most promising option. The indicator price delivers most of the certainty benefits that participants seek, while the next day timeframe for settlement prices allows for enhanced pricing accuracy.</p>
35	Unclear	M-co	See answer to question 6.
36	Unclear	Meridian	<p>Meridian considers that changes to any of the three options will be a complex undertaking with little or no benefit to the majority of participants, at least in the near to medium term. As indicated above, Meridian is concerned that the cost/benefit analysis is incomplete. Meridian queries whether or not the Commission has considered the cost of upgrading generator metering as well as off take metering, both of which are costly to upgrade. Meridian notes that intermittent generator metering may also need upgrading under this proposal. Meridian recommends that these costs need to be considered in a cost benefit analysis of this proposal. Meridian also notes that any price settlement on SCADA will be very inaccurate – when the consultation under Part C was undertaken for the indications and measurements, it was clear from this work that people really didn't know how accurate these systems were. In Meridian's view, they could be much less than 2% accurate in places. Meridian also queries whether, if there was a change to five minute pricing, would offering then also move to five minutes periods?</p>
37	Partially Agree	Mighty River Power	All metering would have to be upgraded to 5 minute revenue class meters at substantial cost if NZEM moved to

Row No.	Agree/ Disagree/ Unclear	Stakeholder	Comment
			5 minute settlement. There would also likely be significant data management issues again at substantial cost. It is not clear that the increase in accuracy in moving to 5 minute settlement would offset these costs.
38	Agree	Todd Energy	Yes, The main objective of moving to 5 minutes prices we believes is moving to an ex-ante pricing regime where participants reacting in real time to price can act on firm pricing information. We believe that this will tend to result in higher prices than ex post prices given that demand will tend to react to high prices but the reduction in demand will not of course affect prices if they are struck prior to the demand reduction. The costs of going to ex ante pricing based on 5 minute pricing appear to be high. While there are some load customers that can react to prices in real time, perhaps they would be better served by a process where there demand is dispatched on a similar basis to generation.

Questions regarding an interim pricing period

Question 8: Do you consider that there should be a clear-cut rule for deciding which type of input errors should be corrected in final prices? Please explain.

Row No.	Agree/ Disagree/ Unclear	Stakeholder	Comment
39	N/A	Contact	Care should be taken not to introduce too much discretion and uncertainty with any interim pricing period. However, this risk could potentially be addressed by attempting to put together clear cut rules for deciding which type of input errors should be corrected in final prices.
40	N/A	Genesis	Genesis Energy considers that there should be processes for correcting all types of input error affecting final prices, regardless of whether or not the errors materially affected indicator or dispatch prices. Gains in authoritativeness and accuracy from error-free final prices justify correcting all types of input errors. The Commission's analysis in support of not correcting errors that affected indicator and dispatch prices seems to ignore that there are differences in the inputs used for indicator prices, dispatch (SDPQ), and final prices, including: <ul style="list-style-type: none"> • different demand forecasts (for indicator versus dispatch); • different solution lengths (half-hour for dispatch and final versus five-minute for indicator); and • scope for the dispatcher to alter constraints that cause dispatch errors. These differences mean that a final price based on incorrect inputs is no more likely to reflect actual dispatch, or true marginal cost of supply, than a corrected final price. Also, it would be more efficient to expose the market only to the constrained-on payments for a generator called on in error, than to leave the clearing price set at the generator's constrained-on price.

Row No.	Agree/ Disagree/ Unclear	Stakeholder	Comment
41	N/A	M-co	To ensure consistency in actions, M-co agrees there should be a clear-cut rule for deciding which type of input errors ought to be corrected in final prices. Without such a rule the certainty in the pricing process is reduced.
42	N/A	Meridian	Meridian submits that some input error “basic variables” should be defined, while there should also be some scope for case by case investigations to be undertaken as and when required. This is because the market and transmission system are changing. Meridian notes that, with the move to MSP and the SFT tools, there may be other unusual pricing outcomes that are unforeseen and need investigating. Meridian further notes, that as the grid becomes tighter, other forms of constraints or pricing outcomes may be experienced.
43	N/A	Mighty River Power	There should be clear cut rules for dealing with the majority of identified errors and a mechanism for errors that are unidentified at the writing of such rules.
44	N/A	Todd Energy	Yes, although we are not adverse to the Electricity Commission having some discretion in the process for deciding which errors are to be corrected.
45	N/A	Transpower	<p>Transpower believes the interim pricing period is a useful initiative to allow market participants to raise concerns about pricing, for example, where an error is discovered in the metering input data.</p> <p>In order to determine which claims should be corrected, it will be important to define clearly the concept of “material effect” proposed by the Commission. Naturally, a broad definition would likely result in a large volume of queries, while a narrow definition could discourage participants from raising pricing issues within the interim process and instead lead them back to the UTS provisions – this, of course, would defeat the purpose of introducing the interim period.</p> <p>Clear guidelines and transparency are required but these need not be totally prescriptive.</p> <p>Transpower considers that the ability to request a rerun should be open to all parties involved in the pricing process (i.e. not just buyers and sellers).</p>
46	N/A	TrustPower	<p>There does not appear to be a compelling case for introducing an interim pricing period. The current UTS provisions allow adequately for participants to notify alleged errors.</p> <p>[Following a phone discussion, TrustPower provided the following clarification:]</p> <p>TrustPower does not see a compelling reason for introducing an Interim Pricing Period, but nor does it oppose the concept proceeding to the next stage of consultation.</p> <p>We consider that the present Rules (Part G Sect V para 3.4) requiring publication of Final Prices by 12:00 on the next trading day (in the absence of a genuine Provisional Price situation) should remain unchanged. To delay the publication of final prices would have implications for our internal processes, including retail billing cycles.</p> <p>Consequently, TrustPower requests that the publication of Interim Prices, should it proceed, be such that pricing error claims are lodged and processed within the existing final price time window. It may also be worth considering some mechanism to deter dubious pricing error claims that may have little substance but which have the potential to take up Pricing Manager resources at an ultimate cost to all participants.</p>

Question 9: What implementation issues do you think would be associated with the development of such a rule?

Row No.	Agree/ Disagree/ Unclear	Stakeholder	Comment
47	N/A	Contact	It would be critical to examine past errors and think about any new trends in errors including those that could emerge from a move of settlement closer to real time.
48	N/A	Genesis	Setting, if required, a materiality threshold for correcting errors. On balance, Genesis Energy considers that a materiality threshold isn't required. Rather, the Commission should retain discretion to decide on a case-by-case basis whether an error warrants correction. In principle, a low (or no) threshold could undermine confidence in the certainty of final prices. However, Genesis Energy expects that errors should be rare enough not to significantly erode confidence. Setting a threshold could neglect to account for the impacts errors can have on participants. For example, a small error at a low volume node may not materially impact overall settlement, but could be very significant for a purchaser at that node.
49	N/A	M-co	For the pricing manager, there would be certain development and operational costs associated with moving to this step. Care would also be needed to ensure that the consequences for the reconciliation and clearing rule based processes were not compromised by this particular initiative.
50	N/A	Meridian	Meridian submits that as long as the rules are developed openly, then any additional variables or the cases that are investigated can be written up and published on the internet. Meridian further submits that the Commission should investigate the pricing rules and associated processes to ensure that timeframes are manageable and understood by the various service providers and participants.
51	N/A	Todd Energy	Rather than specify which types of input errors are corrected and those that are not, the decision to correct input errors could be based on materiality of input errors. We believe that given the restrictions on parties receiving compensation for pricing errors, where input errors have a material affect on price then the input errors should be corrected. Even though correcting for an input error means that generation may be dispatched out of its correct merit order, some of that error will be rectified through constrained on payments. If prices are left unchanged then that has a much wider affect on all market participants through clearing and settlements, and hedge transactions. The main implementation issue would be the process of identification of errors, consideration of them and the publishing of final prices within a reasonable timeframe without unduly affecting settlements and participants faith in the pricing process.
52	N/A	Transpower	Some of the potential issues that Transpower can foresee are: <ul style="list-style-type: none"> • Who would be responsible for amending the input data? • Who would determine the threshold? • Who could request a correction and what would be the timeframe permitted for corrective action? (e.g. post-final, post-interim, post-settlement, several years later?)
53	N/A	TrustPower	See response to question 8.

Question 10: Do you agree with the Commission's preliminary view of the types of errors which should be addressed using an interim pricing period? If not, why not?

Row No.	Agree/ Disagree/ Unclear	Stakeholder	Comment
54	Agree	Contact	Further investigation is needed, particularly on defining materiality, but the EC's preliminary views appears reasonable.
55	Disagree	Genesis	As per responses to Q8 and Q9 above, Genesis Energy would favour there being processes for correcting all types of errors identified by participants and assessed by the Commission as having a material impact.
56	Agree	M-co	Yes. The preliminary view on types of errors appears sufficient.
57	Disagree	Meridian	Meridian disagrees with the Commission's preliminary view on the types of errors which should be addressed using an interim pricing period. In Meridian's view, accuracy is paramount over certainty in this case. Meridian submits that errors resulting from incorrect inputs that were also incorrect in the dispatch process should be corrected for final prices. In summary, Meridian considers that errors should be corrected in a timely manner. Meridian does not consider that interim prices should hold for more than one or two days.
58	Disagree	Mighty River Power	Errors that have a material impact on settlement prices should be corrected, even if they appeared in projected prices (emphasis on authority and accuracy). If errors are having a material impact on projected prices then effort should be expended to reduce those errors to increase the predictability of prices.
59	Disagree	Todd Energy	The main issue we have is the Commissions proposed treatment of incorrect inputs that occur prior to dispatch and have a material affect on dispatch as well as final prices. Parties affected by an incorrect input are unable to seek redress for the loss imposed on them as a result if the error is the result of a breach by a participant or a service provider. We understand the reasons why service providers require protection however we do not believe that simply accepting errors that affect final prices is the best way to deal with such situations.
60	Unclear	Transpower	Transpower believes that option (a) corrections will be the most difficult to justify. However, it considers that the concept of an ability to challenge high (and theoretically low) prices appearing in final prices which have not been signalled to the market is worth investigating further.
61	Unclear	TrustPower	See response to question 8.

Question 11: Do you agree with the Commission's identified options for the design of an interim pricing process? If not, why not?

Row No.	Agree/ Disagree/ Unclear	Stakeholder	Comment
62	Agree	Contact	They appear reasonable but further research is needed.

Row No.	Agree/ Disagree/ Unclear	Stakeholder	Comment
63	Unclear	Genesis	<p>The parameters the Commission has identified are:</p> <ul style="list-style-type: none"> • process and criteria prescription; • materiality threshold; and • duration of the interim pricing period. <p>As per responses to Q8 – Q10 above, Genesis Energy considers that participants should be able to make a pricing error claim for all types of errors and there shouldn't be a set materiality threshold. However, if the Commission is concerned that the volume of error claims may be large, then it could consider other mechanisms for preventing frivolous or vexatious claims. For example, a bond could be set to cover costs of investigating unsuccessful claims.</p>
64	Agree	M-co	Yes. The process appears workable and would not require significant rules redrafting.
65	Agree	Meridian	Yes. Meridian agrees with the Commission's identified options for the design of an interim pricing process.
66	Unclear	Mighty River Power	Mighty River Power believes there should not be a materiality threshold. Market Participants should be able to determine whether making a pricing error claim is worthwhile or not.
67	Agree	Todd Energy	Yes.
68	Unclear	Transpower	<p>Transpower agrees that the concept of an interim pricing period is worth pursuing further, especially as it provides a better means by which to investigate price differences than the UTS route.</p> <p>However, further thought needs to be given to the design options to ensure that they do not become too complex and administratively onerous for participants to implement.</p>
69	Unclear	TrustPower	See response to question 8.

Question 12: How long do you think an interim pricing period should be? Please explain.

Row No.	Agree/ Disagree/ Unclear	Stakeholder	Comment
70	N/A	Contact	This requires a balancing of the benefits of timeliness with the advantages of accuracy. This would in turn depend on the materiality level chosen as this will strongly impact on the number of errors that go through this process.
71	N/A	Genesis	<p>The appropriate duration for an interim pricing period depends on how complex it is to make a claim. It would be desirable for the duration to be short enough to allow prices to be finalised, or a claim lodged, before the end of business hours. As such, five hours would be an appropriate interim pricing period duration.</p> <p>To support a five-hour interim pricing period, the claim process should require the participant to prepare only a high-level description of the pricing error they believe they have identified.</p> <p>The period could be shorter if participants are not required to provide an error description. Conversely, if participants were required to provide detailed analysis to support a claim (for example power flows and nodal</p>

Row No.	Agree/ Disagree/ Unclear	Stakeholder	Comment
			price analysis), then an interim pricing period of several days would be more appropriate.
72	N/A	M-co	M-co's initial view is that the period should be no longer than one business day. This will ensure a degree of timeliness is maintained while still not materially affecting the clearing manager settlement processes.
73	N/A	Meridian	Meridian submits that this should be as short as possible. That is, preferably sorted out within one or two business days, which would allow participants time to review the prices.
74	N/A	Mighty River Power	A sufficiently short amount of time so that settlements are not adversely affected eg final prices must be published no later than 10 working days from the date of trade.
75	N/A	Todd Energy	There should be a limited time for parties to challenge Interim pricing before the status is changed to Final. Generally as we have seen with recent UTS claims, the situations that create the outliers of most interest are generally identified reasonably quickly. A period of 1 -3 business days should be sufficient for the purposes of providing time for parties to challenge prices. The main issue will be making sure that consideration of prices following a challenge and the process for amendment is not overly time consuming such that it interferes with the normal clearing and settlements process. Generally, participants need final pricing information soon after month end so that invoices can be raised for settlement on the 20th of that month. This makes dealing with pricing challenges close to month end problematic in that sense so process for investigation and correction of errors will need to be relatively streamlined.
76	N/A	Transpower	The primary concern with the introduction of an interim pricing period is the commercial one of balancing price certainty against finality of settlement. This should be the driver for both the trade-off and the length of the time period. Any period also needs to take account of practical restrictions such as workload, and ensure that any delay in final pricing does not have a flow-on effect which may lead to a breach of settlement obligations.
77	N/A	TrustPower	See response to question 8.

Question 13: Do you agree with the Commission's initial cost benefit assessment? If not, why not?

Row No.	Agree/ Disagree/ Unclear	Stakeholder	Comment
78	Agree	Contact	The EC's focus on materiality appears appropriate for further investigation of this issue.
79	Partially agree	Genesis	Genesis Energy agrees with the conclusion, but disagrees that a materiality threshold will necessarily be required to contain direct costs or limit damage to authoritativeness.
80	Agree	M-co	M-co agrees broadly with the analysis but notes that, if the interim pricing period is minimised to a single business day it will allow sufficient time to review prices without a significant downside impact.

Row No.	Agree/ Disagree/ Unclear	Stakeholder	Comment
81	Agree	Meridian	Yes. Meridian supports this initial assessment. However, in Meridian's view the Commission has undertaken a substantially greater review than is required given the problem definition.
82	Unclear	Mighty River Power	A full cost benefit analysis should be undertaken and publicly published before continuing with this initiative.
83	Agree	Todd Energy	Yes.
84	Unclear	TrustPower	See response to question 8.

Questions regarding aligning the pricing process with the dispatch process

Question 14: Do you agree with the problem as described above? Please explain.

Row No.	Agree/ Disagree/ Unclear	Stakeholder	Comment
85	Agree	Contact	Contact agrees there is a problem and that replacing the binary approach to aligning pricing and dispatch with a more graduated approach deserves further investigation. [Contact provided the following clarification:] Binary refers to Risk Adjustment Factors of 0 or 1. They are looking into having a range e.g. 0, 0.2, 0.4, 0.6 etc. We're in favour of them looking into a graduated rather than a binary approach to RAFs.
86	Agree	Genesis	Yes.
87	Agree	M-co	M-co agrees with the current problem as prescribed in the document.
88	Disagree	Meridian	Meridian queries whether there are ramp rate issues that also need to be considered in this review? Meridian submits that, if the initial condition changes (that is the starting level of each generator) over the periods where a slow thermal is ramping, then changing the timing could cause ramp rate constraints. Meridian recommends that the Commission provide detail on each of the initial conditions rather than just giving an example of the RAF's.
89	Agree	Mighty River Power	Yes
90	Agree	Todd Energy	Yes.
91	Disagree	Transpower	No. The "initial conditions" model is the market design and the basis for the willing buyer/willing seller contract. The proposed changes are incompatible with the current market design. The current proposal mixes commercial conditions with an academic pricing solution. Transpower believes that the commercial conditions should prevail.

Question 15: Do you agree with the Commission's options and initial assessment? Please explain.

Row No.	Agree/ Disagree/ Unclear	Stakeholder	Comment
92	Disagree	Genesis	Genesis Energy strongly supports the option of consistently basing final pricing inputs on the first feasible dispatch schedule (option b). Genesis Energy disagrees that this would reduce authoritativeness or heighten the need for system operator oversight. After all, the system operator already uses the dispatch schedule to dispatch generation.
93	Agree	M-co	M-co considers that inputs should always be based on the dispatch schedule (option (b)). The pricing process was designed to provide a 'natural audit' of the dispatch process as opposed to it replicating dispatch. This concept was reaffirmed by the Market Surveillance Panel operating under NZEM which in essence ordered the pricing manager not to make ex-post changes to the pricing schedule (except for infeasibilities) to reflect real time adjustments. This preserves the authoritativeness of the pricing process. [Clarification was provided by M-co, as follows:] The first sentence in M-co's submission should read "M-co considers that inputs should always be based on initial conditions (option (a))." The rest of M-co's comment remains unchanged.
94	Agree	Meridian	Meridian submits that, as final pricing solutions are based on half hour dispatch and half hour offers, it is optimal if the initial conditions are based on the start of the period. Meridian notes that delays in the dispatch schedule process (which may increase under MSP) provide too much uncertainty.
95	Agree	Mighty River Power	Yes. Pricing conditions should not be based on a dispatch schedule. Any action by the SO (e.g. for security) will result in a sub-economic dispatch and an overall increase in cost to the market. This option is only feasible if ancillary services are also optimised in SPD.
96	Agree	Todd Energy	Yes. The concept that pricing is based on "contractual" conditions at the start of a trading period is a good one. It means that issues that arise intra trading period due to unforeseen circumstances can be likened to an FM event and the relief available under that contract. We also agree that if we start down the path of breaking trading periods down to 5 minute sub periods then naturally it leads to revising the basis for offering and reconciliation as well – ie moving to 5 minute offers and reconciliation and clearing and settlement for each 5 minute period. That is a level of disaggregation that we believe will not yield significant benefits and will increase substantially costs of market operation.

Questions regarding the accuracy of metering information

Question 16: What is your view on the current level of data estimation allowed to flow through into final prices?

Row No.	Agree/ Disagree/ Unclear	Stakeholder	Comment
97	N/A	Contact	Contact believes the current thresholds are set too high and can affect the accuracy of final prices. In particular: <ul style="list-style-type: none"> • Large volume GXP / GIP can influence prices within that geographical or electrically connected region. • Where a number of GXP's are affected within a geographical region or electrically connected • GXPs at the end of spur lines or where there is material embedded generation connected at a distribution level.
98	N/A	Genesis	The paper does not provide analysis of the level of data estimation that actually occurs. It would be useful to know how often, and how much, load is estimated. The paper indicates that an estimate for up to 7% of demand is allowed to flow through to final prices. Genesis Energy believes this is far too high and the target allowance should be close to zero.
99	N/A	M-co	M-co notes that any level of estimation is going to be somewhat arbitrary. There is a trade-off between accuracy of metering and delays to pricing because of metering situations. Our position is that the current threshold is appropriate. The little analysis done to date shows that, in general, prices change little from provisional to final unless there is a large time lag between the initial estimate and the actual pricing period. This latter issue can be addressed separately and would not be resolved completely by altering the threshold.
100	N/A	Meridian	In Meridian's view the current level of data estimation allowed to follow through into final prices is too high. Meridian recommends that the Commission undertakes some analysis to determine how much estimated load is going through into final pricing and look to remedy this.
101	N/A	Mighty River Power	A maximum error of 7% of load is far too large a bound. While we do not want a plethora of metering situations, far tighter constraints or targets should be applied. The impact of demand estimation on prices needs to be assessed before further work is conducted.
102	N/A	Todd Energy	Given the added complexity of intermittent generation we agree with the concern of the Commission that the list of GXP's > 300GWH and 500GWH is not updated regularly enough.

Question 17: Do you agree that the Commission should further investigate options for reducing the amount of estimated data that is allowed to flow through into final prices? Please explain.

Row No.	Agree/ Disagree/ Unclear	Stakeholder	Comment
103	Agree	Contact	While the current approach to pricing is for timeliness to take precedence over accuracy, the current thresholds

Row No.	Agree/ Disagree/ Unclear	Stakeholder	Comment
			were applied based on the technology available in 2003. Given the technological improvements now available in terms of communications and meter reliability, these thresholds can be lowered to improve accuracy without a detrimental impact on timeliness.
104	Agree	Genesis	Yes. Genesis Energy believes that the Commission should aim to ensure that a “metering situation” is a rare event. In principle, metering availability standards for grid exit points should be no less onerous than the equivalent standards for generators. Generators are required to ensure market data is available in real time to the grid owner and system operator and must provide back up systems to ensure near 100% availability. It should be possible for the grid owner to provide similar availability of five-minute data from its 200 grid exit points without requiring a level of new investment that is unreasonable in the context of the size of the market dependent on that metering data.
105	Disagree	M-co	M-co believes that the premise of the exercise is wrong. The exercise, if it were undertaken, should instead investigate an appropriate level of estimated data and variability of demand at particular nodes that can be tolerated within the pricing process to achieve timeliness.
106	Agree	Meridian	Yes, see our response to question 16. However, Meridian recommends that the Commission determine the size of the problem before attempting to remedy it.
107	Agree	Mighty River Power	Yes.
108	Agree	Todd Energy	Yes. Ideally, the lower the level of estimates used in pricing the better.

Question 18: Do you agree with the options to address concerns about the metering situation trigger? Are there any other options you would like the Commission to consider?

Row No.	Agree/ Disagree/ Unclear	Stakeholder	Comment
109	Disagree	Contact	Contact believes the proposed options should not be the only ones considered. Contact would like to see consideration given to reducing the upper caps on options 7.3.2 (a) and 7.3.2 (b) to 300 GWH and 200 GWH respectively. Alternatively consideration could be given to using GXP capacity as the measure of importance given to classifying a metering situation. This would remove the need for a regular refresh of this list. In addition, we recommend further investigation into whether or not the number of GXPs / GIPs without data can be grouped by the Reconciliation Balancing Area concept and that only 1 GXP is allowed to be missing or incomplete. Where the Reconciliation Balancing area consists of a single GXP / GIP then any missing or incorrect data would constitute a metering situation. Furthermore, a GXP with embedded generation connected behind it, where this embedded generation can

Row No.	Agree/ Disagree/ Unclear	Stakeholder	Comment
			influence the GXP demand by more than 20 per cent, is another criteria to be considered for a metering situation. Intermittent generation can impact on final prices whether it is connected at a transmission or distribution level.
110	Disagree	Genesis	No. The proposed options are too timid. At minimum, the rules should require near 100% availability of metering data for large (>300 GWh per annum) nodes. Excessive reliance on demand estimates could have significant economic impacts. The rules should not tolerate excessive reliance on demand estimates when relatively simple and achievable technological remedies exist.
111	Disagree	M-co	See response to question 17.
112	Disagree	Meridian	In Meridian's view, the trigger is quite loose and should be tighter. Meridian recommends that the Commission establishes how much inaccurate their load has actually been and how often. Once the size of the problem is established, the Commission can more accurately evaluate options to define the trigger size.
113	Disagree	Mighty River Power	The rules should be reviewed to encourage better and more accurate metering for all participants on a more equal basis, rather than excessive reliance on demand estimates.
114	Agree	Todd Energy	Yes.

Question 19: Do you agree with the Commission's initial assessment? If not, why not?

Row No.	Agree/ Disagree/ Unclear	Stakeholder	Comment
115	Disagree	Contact	Contact believes this initial assessment is premature given that not all options have been investigated at this point. Also given the expected meter / replacement program that Transpower is to embark on it is prudent to set the expected data quality and communication performance levels the industry would require to improve confidence in setting pricing. Therefore option (b) should not be discounted at this stage.
116	Disagree	Genesis	No. As per the response to Q18 above, the Commission should focus on reducing the need for data estimates rather than focussing on the incidence of metering situations. In other words, the Commission should focus on the problem rather than a symptom.
117	Disagree	M-co	See response to question 17.
118	Agree	Meridian	Yes. However, as per our response to question 18 above, Meridian submits that it is important to first understand the size of the problem being dealt with.
119	Disagree	Mighty River Power	Option (a) is a quick and cost effective start, but the Electricity Commission should be focussing on resolving the root cause of metering issues – accuracy of metering.

Row No.	Agree/ Disagree/ Unclear	Stakeholder	Comment
120	Agree	Todd Energy	Yes.
121	Unclear	Transpower	The present thresholds were set so as to be neutral over a period of a year. Transpower suggests that this analysis be repeated to determine whether or not it is necessary to revise the thresholds. In the absence of any data on which to evaluate the effects on final pricing, it is difficult to draw a conclusion on the proposed options. However, Transpower believes that caution must be exercised before tightening the thresholds as this will result in an increased number of metering situations and consequently the number of provisional prices. This, in turn, would result in delays in the publication of final prices.

Question 20: Do you agree that the Commission should consult on a proposed amendment to the Rules to require the annual consumption list (rule 3.32 of section V of part G of the Rules) to be updated and published monthly to account for monthly variations in demand?

Row No.	Agree/ Disagree/ Unclear	Stakeholder	Comment
122	Disagree	Contact	Contact believes that additional options should also be investigated prior to any formal consultation regarding rule 3.32 of Section V of Part G. Formal consultation should be undertaken given the possible impacts to generators who are required to provide metering information to the Pricing Manager.
123	Agree	Genesis	Yes, as an interim step. Genesis Energy believes the Commission should do further work on quantifying and reducing the problem of poor metering data availability.
124	Agree	M-co	M-co agrees that the annual consumption list should be published monthly as seasonal impacts on consumption will be more accurately accounted for when determining metering situation events.
125	Agree	Meridian	Yes, so long as there are no significant costs involved.
126	Agree	Mighty River Power	Yes.
127	Disagree	Todd Energy	Is further consultation required if the proposal has significant support through this consultation document? The only issue that may need consultation is the form of the rules drafting.

Question 21: Do you agree that the Commission should consider incorporating some flexibility into the definition of ‘initial estimate’ to account for situations where the initial estimates are likely to be particularly inaccurate? Please explain your answer.

Row No.	Agree/ Disagree/ Unclear	Stakeholder	Comment
128	Agree	Contact	With more and more intermittent embedded generation being installed nationally the influence this has on GXP load and profile has a material impact on price. Where data for these GXPs is required to be estimated, the current options are too restrictive in ensuring that accurate data estimates are being provided.
129	Agree	Genesis	Yes.
130	Agree	M-co	Yes. The Commission should consider incorporating some flexibility into the definition of an ‘initial estimate’. If flexibility is introduced, M-co believes the Commission should also publish a guideline stating what sort of estimates it considers appropriate. A suggested change might be a reference in the Rules as to such a guideline. A particular area where estimated data is a concern is during early January when, because of proximate public holidays, the initial estimate can be based on a day that is several weeks prior to actual trading. This often results in higher demand than in reality being used in the price calculations.
131	Agree	Meridian	Yes. However, Meridian queries why the Commission does not propose to allow calibrated SCADA readings? For example, Meridian notes that the SCADA readings could be calibrated with revenue metering readings at sites where these are both present. In these instances, when the metering data is missing, the adjusted (calibrated) SCADA could be used to provide interim data.
132	Agree	Mighty River Power	A very flexible methodology for allowing estimates is desirable (eg: estimation on a case by case basis even with no prescribed methodology). However, the values and methodologies used must be published publicly to allow scrutiny and review to restore authority to the pricing process.
133	Agree	Todd Energy	Yes. Initial estimates should also take into account quantities metered immediately prior to the period which require an estimate. That will assist reducing estimates errors when same day prior week/year are used.
134	Agree	Transpower	Transpower agrees that a degree of flexibility is required in extreme circumstances where the equivalent day demand appears unrepresentative, but believes that the requirement to achieve accuracy in such situations should be on the basis of “reasonable endeavours” only. It would be useful to have examples of how the demand would be derived in these cases (e.g. using some element of the previous day’s demand, etc.).

Question 22: Do you agree that the Commission should consider extending rule 3.3.2.2 of section V of part G of the Rules (and other related rules) to require an initial estimate to be provided when data is identified as being incorrect rather than just when data is not available? Please explain your answer.

Row No.	Agree/ Disagree/ Unclear	Stakeholder	Comment
135	Agree	Contact	Contact believes that the most accurate data should be made available for the calculation of initial prices.
136	Agree	Genesis	Yes.
137	Agree	Meridian	Yes, Meridian considers that accuracy is important. Meridian submits that missing or inaccurate data should be replaced with better data. See our response to question 21 as an example.
138	Agree	Mighty River Power	Yes. Incorrect data will lead to incorrect pricing and accuracy is a highly desirable trait of pricing.
139	Agree	Todd Energy	Yes.
140		Transpower	This appears logical, but Transpower considers that the word “incorrect” needs to be clearly defined. There also need to be clear guidelines about how rule 3.3.2.2 will be applied. For example, Transpower would not like to see a situation where “unknowingly” incorrect data are supplied and then later found to be incorrect, and a rule breach is then alleged for not supplying an estimate.

Question 23: Are there any practical issues associated with implementing this initiative?

Row No.	Agree/ Disagree/ Unclear	Stakeholder	Comment
141	N/A	Contact	Given the tight timelines around provision of pricing information, any further analysis / data substitution would need to fit the existing timelines for provision of pricing information.
142	N/A	Genesis	Genesis Energy is not aware of any practical issues.
143	N/A	M-co	Yes, rule 3.3.2.2 of section V or part G should be extended. Such an initiative could reduce the number of infeasibilities in the pricing process.
144	N/A	Meridian	Yes. For instance, which party decides when the data is incorrect? What is the test? What is the process for deeming whether data is incorrect or not? Meridian submits that this needs to be made clear in order to make this initiative successful.
145	N/A	Mighty River Power	Yes. How is it determined whether data is incorrect or not? How long is the review period for correcting or estimating this data?
146	N/A	Todd Energy	The main issue with overriding meter information is determining which metered information is correct and that which is not. We believe that drafting the rules to provide discretion to override metered information will be difficult as there needs to be protection against unnecessary “smoothing” of metering information. Perhaps some disclosure requirements will be necessary and in conjunction with the interim pricing period proposal that this sort of increased use of discretion will be workable.

Question 24: Do you agree that the Commission should consider removing the requirement for generators to provide metering information directly to the pricing manager? If not, why not?

Row No.	Agree/ Disagree/ Unclear	Stakeholder	Comment
147	Agree	Contact	Contact currently provides daily generation data to EMS who we understand acts as data collection agent for both the grid operator and the Pricing Manager. Therefore removing the requirement for generators to provide information to the pricing manufacturer will not change Contact's current processes.
148	Agree	Genesis	Yes.
149	Agree	M-co	Yes. As well as increasing generator transaction costs, it is also more efficient for a single party to be responsible for collating this information.
150	Agree	Meridian	Yes. Meridian agrees that the Commission should consider removing the requirement for generators to provide metering information directly to the pricing manager.
151	Agree	Mighty River Power	Yes.
152	Agree	Todd Energy	Yes.
153	Agree	Transpower	Transpower supports this change, provided that the Grid Owner continues to have access to all information required to prepare the input data.

Question 25: Do you agree that using metered data from intermittent generation as an offer in the calculation of final prices is likely to lead to more certain and accurate final prices? If not, why not?

Row No.	Agree/ Disagree/ Unclear	Stakeholder	Comment
154	Agree	Contact	Contact agrees that meter data from intermittent generators, both grid connected and embedded should be considered in the calculation of final prices. Thresholds may need to be considered so that small / insignificant generators are not bound by these requirements.
155	Agree	Genesis	Yes.
156	Agree	M-co	Yes. When the intermittent generator rules were being developed, this option was considered. It was however not implemented due to the timing and costs of service provider system changes that would be required. Instead the simpler 'negative demand' option was selected.
157	Agree	Meridian	Yes. Meridian strongly supports this position.
158	Agree	Mighty River Power	Yes. Dispatch of intermittent generation is a far bigger issue than just pricing.
159	Agree	Todd Energy	Yes, assuming that intermittent generators act on the dispatch instructions and reduce generation when required.
160	Agree	Transpower	Transpower agrees that the proposed use of metered data from intermittent generators is worth investigating further.

Row No.	Agree/ Disagree/ Unclear	Stakeholder	Comment
			<p>In Transpower's view, the main advantage of the concept is that the inclusion of intermittent generators alongside other generators' offers should mean that no unexpected constraints bind in the calculation of final prices.</p> <p>Any changes should relate to "offered" intermittent generation (whether directly connected or embedded). This will require changes to the demand half-hour metering calculations in Part G Section V Rule 3.3.2.1 and will also require embedded intermittent generators to supply MWh information. Treatment of "unoffered" intermittent generation should remain unchanged.</p>

Question 26: Do you agree that this initiative should be progressed further?

Row No.	Agree/ Disagree/ Unclear	Stakeholder	Comment
161	Agree	Contact	
162	Agree	Genesis	Yes.
163	Agree	M-co	See response to question 25.
164	Agree	Meridian	<p>Yes. Meridian notes that, in practice, in a five minute dispatch period wind farms are constrained off to relieve constraints either manually or automatically. By not having this reflected in half hour pricing (that is, treating it as negative demand rather than an offer) it does not reflect the same flexibility in the pricing process.</p> <p>Meridian has been discussing this initiative with the System Operator for a number of years and is pleased to see it included in the Commission's work.</p>
165	Agree	Mighty River Power	Yes.
166	Agree	Todd Energy	Yes.

Questions regarding the clarity of the pricing process

Question 27: Do you agree that a document explaining the system operator's process for resolving infeasibilities and high spring washer price situations should be published on the Commission's website?

Row No.	Agree/ Disagree/ Unclear	Stakeholder	Comment
167	Agree	Contact	Yes.
168	Agree	Genesis	Yes.

Row No.	Agree/ Disagree/ Unclear	Stakeholder	Comment
169	Agree	M-co	Yes. As long as the system operator's intellectual property is not infringed by publishing its processes.
170	Agree	Meridian	Yes, Meridian supports this proposal.
171	Agree	Mighty River Power	Yes.
172	Agree	Todd Energy	Yes- so long as the cost is very low.
173	Agree	Transpower	Transpower has provided a document to the Commission explaining the System Operator's process for resolving infeasibilities and high spring washer price situations and is happy for it to be published on the EC website. Transpower would also be happy to answer any specific questions or concerns that participants may have about its processes.
174	Agree	TrustPower	Yes.

Question 28: Does the document in Appendix D provide sufficient detail? If not, what changes would you suggest?

Row No.	Agree/ Disagree/ Unclear	Stakeholder	Comment
175	Disagree	Contact	The document is good. It would be beneficial to have a worked example of a High Spring Washer Price situation to give further clarity to the process.
176	Disagree	Genesis	The document could be fleshed-out, but it does provide a good starting point.
177	Agree	M-co	See response to question 27.
178	Agree	Meridian	Meridian considers that this contains sufficient details. Meridian submits that parties should be able to request an update of the document if it is discovered that it doesn't contain the correct amount of information.
179	Disagree	Mighty River Power	No.
180	Agree	TrustPower	Yes.

Question 29: Do you agree that information on how to access pricing inputs should be published on the Commission's website?

Row No.	Agree/ Disagree/ Unclear	Stakeholder	Comment
181	Agree	Contact	Yes.
182	Agree	Genesis	Yes.
183	Agree	M-co	Yes. Although noting that certain datasets are subscription based.
184	Agree	Meridian	Yes. Meridian supports this proposal.

Row No.	Agree/ Disagree/ Unclear	Stakeholder	Comment
185	Agree	Mighty River Power	Yes.
186	Agree	Todd Energy	Yes.
187	Agree	Transpower	Transpower agrees that links to information on pricing inputs (but not the data themselves) should be published, to ensure that commercial sensitivity is protected.
188	Agree	TrustPower	Yes.

Question 30: Does the table in Appendix F provide sufficient information? If not, what changes would you suggest?

Row No.	Agree/ Disagree/ Unclear	Stakeholder	Comment
189	Disagree	Contact	Further detail would be beneficial on each input, say two pages instead of one page.
190	Disagree	Genesis	If would be useful to include information on where within each system the relevant data can be found.
191	Agree	M-co	See response to question 29
192	Agree	Meridian	Yes. Meridian considers that the table in Appendix F contains sufficient information.
193	Disagree	Mighty River Power	No. Where in the source do you find the date i.e. specific URLs?
194	Agree	Todd Energy	Yes.
195	Disagree	Transpower	It would be useful to have the page on each site referenced in addition to the data source.
196	Agree	TrustPower	Yes.

Question 31: What information do you believe should be made freely available to participants?

Row No.	Agree/ Disagree/ Unclear	Stakeholder	Comment
197	N/A	Genesis	In principle, transparency of the pricing process is a desirable attribute and all relevant information should be available. However: <ul style="list-style-type: none"> • where there is a significant cost to providing information, decisions should be based on assessment of costs and benefits; and • normal delays on publication of commercial data (such as offers) should be maintained.
198	N/A	M-co	Subject to commercially sensitive data (e.g. generator offers), all input information used in the pricing process should be made publicly available in a timely manner. This ought to be available only on a user pays basis to ensure that dataset provision is not being cross-subsidised by non users of the information.
199	N/A	Meridian	In Meridian's view the status quo is satisfactory.

Row No.	Agree/ Disagree/ Unclear	Stakeholder	Comment
200	N/A	Mighty River Power	Everything involved in the pricing process should be freely available and published.
201	N/A	Transpower	Transpower agrees in principle that as much clarity as possible should be provided, but this needs to be weighed alongside the commercial sensitivity (as determined by the Commerce Commission) of the data and the ease with which it can be retrieved and published.

Question 32: Do you support the initiative to review the pricing rules at this time?

Row No.	Agree/ Disagree/ Unclear	Stakeholder	Comment
202	Agree	Contact	Contact supports the redrafting of the pricing rules to make them less confusing for the end user.
203	Disagree	Genesis	No. Genesis Energy believes that the Commission has more important priorities than re-drafting the pricing rules.
204	Disagree	M-co	The idea of a review is not unwelcome as there are certain inconsistencies in the pricing rules that need addressing. This should not however extend to a complete redraft.
205	Disagree	Meridian	No. In Meridian's view this likely to result in costs which are significantly higher than the benefits, due to the level of metering capital expenditure required.
206	Disagree	Mighty River Power	No.
207	Disagree	Todd Energy	No.
208	Agree	Transpower	Transpower supports a review of the pricing rules as part of a wider review of Part G as a whole. The rules should be logical, easy to follow and should avoid repetition. Transpower believes that piecemeal changes are more likely to create further ambiguities and inconsistencies within the existing rules, as well as potentially making the rules more difficult to follow as a result of the addition of new sections and numbering.
209	Agree	TrustPower	Yes, but as a low priority.

Question 33: What benefits do you think will arise from redrafting the pricing rules?

Row No.	Agree/ Disagree/ Unclear	Stakeholder	Comment
210	N/A	Contact	Less interpretation time - end users can read and understand clearly.
211	N/A	Genesis	Benefits would be negligible. Re-drafted rules may reduce the time new participants spend familiarising themselves with what information is required and when. Publishing a set of clear pricing process flow charts would achieve this benefit at less cost.

Row No.	Agree/ Disagree/ Unclear	Stakeholder	Comment
212	N/A	M-co	No benefits are obvious that could be achieved by a redraft of the pricing rules.
213	N/A	Meridian	Meridian does not consider there will be significant benefits from redrafting of the rules.
214	N/A	Mighty River Power	No significant benefits are evident.
215	N/A	Todd Energy	Very little in the short term.

Question 34: What do you think are the risks/costs associated with redrafting the pricing rules?

Row No.	Agree/ Disagree/ Unclear	Stakeholder	Comment
216	N/A	Genesis	Genesis Energy expects there would be: <ul style="list-style-type: none"> • a risk of the re-drafting costs significantly exceeding the Commission's initial estimate; • a risk of unintended consequences; and • costs for participants familiarising themselves with re-drafted rules and assessing any commercial risks.
217	N/A	M-co	M-co believes that the structure of the rules is adequate to enable the pricing manager to meet its obligations. As the pricing process is complex, any significant redrafting runs the risk of creating increased compliance risk and may introduce a raft of new compliance issues. M-co contends that as a priority, this would seem to rank very low compared with other minor rule changes that could be made to this section of rulebook.
218	N/A	Meridian	Meridian considers that the biggest risk/cost associated with redrafting the rules is that additional errors are incorporated in the rules (for example, incorrect cross references).
219	N/A	Mighty River Power	We think the costs will outweigh the benefits.
220	N/A	Todd Energy	Significant legal expenditure which may not be recovered if any of the market reviews under way (of which there are at least 2) result in any sort of fundamental change to the market process.

Questions regarding UTS provisions

Question 35: Do you think the criteria for determining a UTS, as set out in regulation 55(1), are appropriate? If not, how do you think a UTS should be defined?

Row No.	Agree/ Disagree/ Unclear	Stakeholder	Comment
221	Agree	Contact	Yes it is appropriate. If the definition is narrowed it could take away some of the catch all provision of the regulation.

Row No.	Agree/ Disagree/ Unclear	Stakeholder	Comment
222	Agree	Genesis	<p>Yes, however, Genesis Energy considers that, in the absence of a provisional pricing process, the Commission should interpret regulations 55(1) and 55(2) as setting a slightly lower bar than described in the consultation paper.</p> <p>In particular, Genesis Energy is not comfortable with the Commission's interpretation that a situation must pose a permanent and immediate threat to orderly trading or proper settlement before satisfying the criteria. This approach neglects situations that:</p> <ul style="list-style-type: none"> • have a temporary but significant impact; or • could have a significant impact over time (for example, by eroding participant confidence). <p>Notwithstanding the above, the Commission's interpretation would be more tenable if there were an intermediate mechanism for dealing with less severe situations. An interim pricing process could be a suitable mechanism.</p>
223	Agree	M-co	<p>Yes. M-co is of the view the criteria for determining UTS is appropriate. M-co contends it is undesirable to use the UTS provisions as a means to mitigate against high pricing outcomes that result from the current demand, generation and transmission configurations. If the underlying causes of high prices are not being addressed by the industry, then using the UTS process to change pricing outcomes (other than for data input errors) produces further uncertainty for participants and stakeholders. The introduction however of an interim pricing period with improved transparency will allow further scrutiny by participants of the pricing inputs and results before prices are finalised.</p>
224	Agree	Meridian	<p>While the criteria in regulation 55(1) are very general, the range of situations that the Commission may need to deal with as a UTS is also wide, and therefore Meridian considers that the criteria are appropriate.</p>
225	Agree	Mighty River Power	<p>Yes. But other mechanisms need to exist in order to address participants pricing concerns.</p>
226	Unclear	Todd Energy	<p>The number of UTS claims resulting from pricing conditions suggests that pricing is an issue. If the proposal to adopt an interim pricing phase whereby prices can be challenged prior to publication, this will likely reduce the number of UTS claims.</p>
227	Agree	Transpower	<p>Transpower considers that the current definition should be retained.</p>
228	Agree	TrustPower	<p>The criteria are appropriate provided they are interpreted under 55(2)(e) to include circumstances that "threaten generally accepted principles of trading". A key principle of trading is that prices are explicable in delivering lowest cost outcomes to the consumer. Any price outcome that is not defensible by the Pricing Manager in achieving this aim should be open to challenge as a UTS.</p>

Question 36: Do you agree with the Commission's assessment that a rule breach would normally have an extra element to it, such as an attempt at market manipulation or misleading or deceptive behaviour, to be classified as a UTS?

Row No.	Agree/ Disagree/ Unclear	Stakeholder	Comment
229	Agree	Contact	Yes.
230	Disagree	Genesis	No. Regulations 55(2)(a) and (b) do not limit interpretation of 55(2)(d). Similarly, Genesis Energy considers that the Commission's interpretation of 55(1) is too limited. Genesis Energy agrees that a rule breach does not automatically satisfy the criteria for declaring a UTS. However, Genesis Energy does not agree that intent is necessarily a determinative factor in assessing whether a rule breach should trigger a UTS. Instead, Genesis Energy considers that the Commission should consider the effect of a rule breach on orderly trading and proper settlement. As per response to Q35, whether or not there is an interim pricing process should influence the Commission's assessment of the effect of a rule breach.
231	Disagree	Meridian	Meridian considers that the Commission's interpretation of regulation 55 is incorrect. Meridian notes that Regulation 55(1) sets out the general test for a UTS and regulation 55(2) lists specific matters that are deemed to be a UTS. The matters in regulation 55(2) are automatically UTSS, they need not also meet the criteria in regulation 55(1) (in contrast to the Commission's para 9.4.6). This makes the range of matters that constitutes UTSS very wide as the regulation 55(2) matters are varied. Meridian disagree that, on currently drafting, regulation 55 requires an "extra element" such as market manipulation. Meridian does not consider that this is desirable. For example, an unusually high provisional price may arise from a quirk or error in SPD, such as the Bay of Plenty high spring washer event in April 2004. Meridian submits that the Commission should be able to adjust final prices to remove that quirk without needing to find "bad" conduct.
232	Disagree	Mighty River Power	No. The primary intent of the UTS provision is to address situations as in 55(1). This does not necessarily require intent.
233	Disagree	Todd Energy	No – rule breaches can happen for a number of reasons that may affect orderly trading. While some of the examples provided for in s55(2) do have that “extra” element there is also the catch all e) of Unforeseen circumstances that threatens trading. Todd Energy believes that an error resulting in a material event that could leave a company insolvent is something that fits with s55 (2) (e). Rule breaches by service providers the pricing process in particular can have a significant affect on trading conditions and may happen where there is no advantage gained by the service provider yet affected parties are not able to claim compensation for their breach.
234	Agree	Transpower	Yes.
235	Agree	TrustPower	Yes, but request retention of the existing clause 55(2)(d) which allows UTS to be examined on the basis of a material rule breach.

Question 37: Do you think regulation 55(2)(d) should be amended to state that a UTS includes a “material breach of any law, other than a breach of the rules or regulations”, or should it be revoked entirely?

Row No.	Agree/ Disagree/ Unclear	Stakeholder	Comment
236	N/A	Contact	It should be revoked entirely so that it does not limit the intent of the UTS provision under the regulations.
237	N/A	Genesis	No. Genesis Energy strongly believes the regulation should remain unaltered so as not to reduce the scope for declaring a UTS.
238	N/A	Meridian	The phrase "material breach of any law" was presumably intended to refer to a breach of the Commerce Act, with the intention that the UTS regime would allow the Commission to be able to deal quickly with collusive behaviour rather than waiting for the Commerce Act process to take its (long) course. Therefore, Meridian considers that regulation 55(2)(d) should remain. However, Meridian agrees that breaches of the rules and regulations should be excluded, given that the regulations already contain a process for dealing with, and consequences for, breaches.
239	N/A	Mighty River Power	No. We believe the UTS scope should remain unaltered.
240	N/A	Transpower	Transpower considers that the regulation should be amended rather than revoked entirely.
241	N/A	TrustPower	No, request the clause be retained allowing discretion over materiality.

Question 38: Do you think any changes need to be made to the way in which the Commission investigates UTS claims?

Row No.	Agree/ Disagree/ Unclear	Stakeholder	Comment
242	N/A	Contact	No, the EC should investigate every UTS claim made.
243	N/A	Genesis	No. However, note responses to Q35 and Q36 regarding how the Commission applies the test for declaring a UTS.
244	N/A	M-co	No. The Commission's UTS claim investigation process appears sound.
245	N/A	Meridian	Meridian considers that that the more timely these investigations are undertaken the better. Given the speed with which UTS investigations need to be undertaken, it is appropriate that the Commission is given more discretion that usual.
246	N/A	Mighty River Power	Yes. The UTS process should be more timely as the speed with which UTS claims are resolved is imperative. Waiting until the next regular board meeting is undesirable. It would be desirable to set a target timeline to resolve any and all UTS claims, for example, 5 working days, although we understand that it may not always be possible to do so in that timeframe.
247	N/A	Transpower	No.
248	N/A	TrustPower	No

Question 39: Do you believe the Commission should have the power to direct participants to act in a manner that is inconsistent with the Rules or Regulations in order to resolve a UTS?

Row No.	Agree/ Disagree/ Unclear	Stakeholder	Comment
249	N/A	Contact	The EC should have the power to direct participants to act in a manner that is inconsistent with the rules or regulations. However, there should be a framework in the regulations that covers this provision. For example this could be applied to Spring Washer situations when the Spring Washer rule methodology does not provide a credible output.
250	N/A	Genesis	Genesis Energy seriously doubts the regulations could lawfully include provision for the Commission to direct participants to break the law. It would be extraordinary for Parliament to delegate such an authority. A lawful way of achieving the Commission's objective could be to examine any regulations or rules the Commission might contemplate wishing to violate and assessing whether those regulations or rules could be amended to : <ul style="list-style-type: none"> • allow for their suspension when there is a UTS; or • remove any possible need for their suspension.
251	N/A	M-co	No. The Commission should not direct participants to act in a manner that is inconsistent with the Rules or Regulations. Instead, the Commission should give effect to granting exemptions.
252	N/A	Meridian	Meridian considers that the Commission should not have the power to direct participants to breach the Rules or Regulations, particularly not in the form of a broad power to do so. Instead, any particular rule or regulation that it may be necessary for the Commission to direct a participant to breach should be amended so that a breach does not occur if the Commission has declared a UTS.
253	N/A	Mighty River Power	No. if the rules need revision, revise the rules.
254	N/A	Transpower	No – the Commission should always direct participants to act in accordance with the Rules.

Question 40: Do you believe the remedies in 56(2) are likely to be effective and appropriate for the Commission to correct a UTS? What powers do you believe the Commission should have to correct a UTS?

Row No.	Agree/ Disagree/ Unclear	Stakeholder	Comment
255	N/A	Contact	This is the backstop if there is an undesirable trading situation. The remedies in 56(2) have wide powers as they are there to cover unforeseen circumstances.
256	N/A	Genesis	Yes.
257	N/A	Meridian	Meridian considers that The range of remedies appears appropriate for the range of likely UTSs.
258	N/A	Mighty River Power	Yes. Given the range of issues covered by UTS the powers of the Commission have seem appropriate.
259	N/A	TrustPower	Yes. Current powers are appropriate.

Question 41: Do you agree that the Rules should clearly state that the Board may close out at a specified price if a UTS has occurred?

If so, what is the best course of action for making the Rules clear on this matter: deleting rule 3.27 of section V of part G of the Rules; amending it; or some other course of action?

If not, do you agree that prices should stay final and the UTS remedy to close out at a specified price should be deleted?

Row No.	Agree/ Disagree/ Unclear	Stakeholder	Comment
260	N/A	Contact	Final prices should stay final. If there is an issue identified then a participant should notify the Board so that the publication of prices can be delayed while the issue is rectified before final prices.
261	N/A	Genesis	Yes. Amending the rule to make it clear that the Commission may close out at a specified price if a UTS has occurred.
262	N/A	M-co	Yes. M-co believes the Rules should state that the Board may close out transactions at a specified price in UTS situations. To achieve certainty or uniformity, the setting of prices should be specified in the Rules similar to how the Rules stipulate the setting of prices in the event a pricing infeasibility cannot be resolved.
263	N/A	Meridian	The Commission needs to be able to close out trades at particular prices and therefore the rules need to be amended. The Commission's amended price must become the final price for the purposes of the rules to avoid unintended consequences in existing contracts. Meridian considers that the best course of action would be amending rule 3.27 by deleting the last sentence and replacing it with "However, the Board may order the pricing manager to republish the final price or final reserve price where the Board has found that an undesirable trading situation exists and the Board has amended that final price or final reserve price under regulation 56(2)(c) of the Electricity Governance Regulations."
264	N/A	Mighty River Power	Status quo is adequate. Final prices should remain final. The UTS committee already has the power to specify a price on any trade for the effective purposes of compensation and damages, which is separate to market settlements.
265	N/A	Todd Energy	This issue could be resolved with the introduction of an interim pricing period after which final prices cannot be republished. This would mean that the ability of the Commission to specify a price in s 56 (2) could be deleted. If it was decided that an interim pricing period was not warranted then Rule 3.27 Section V of Part G should be deleted such that the Commission could more easily use S56 (2) to order the republishing of final prices to settle a UTS.
266	N/A	Transpower	Transpower agrees that this inconsistency needs to be addressed. However, the intention of the original rule drafting should be taken into account when considering any changes. In Transpower's view, it would seem more appropriate to amend rule 3.27, as a UTS is only one example of a situation where this provision may be used and deleting it altogether may have unintended consequences. [Transpower provided the following clarification:] [Rule 3.27 should be amended to make it clear that the Board may close out at a specified price if a UTS has occurred], but subject to the qualifications in our submission. Provided that closing out at a specified price does not cause any other participant to breach the rules elsewhere then we remain reasonably neutral on the

Row No.	Agree/ Disagree/ Unclear	Stakeholder	Comment
			specified price.
267	N/A	TrustPower	Prices should stay final once published in order to avoid any disputes regarding hedge settlements, etc. Rule 3.27 of section V of part G requires this and should be retained.

Question 42: Should the Rulings Panel be given the power to award compensation in excess of the penalty limits outlined above? If so, what order of compensation is appropriate and how would the compensation be funded?

Row No.	Agree/ Disagree/ Unclear	Stakeholder	Comment
268	Agree	Contact	Where a service provider breach has caused a financial impact in the market, it is Contact's view that the service provider should be financially exposed to the impact of the action as an incentive for it to modify its behaviour. If as a result of the breach there is a financial loss to participants, then as part of the settlement or Rulings Panel decision, the service provider should be required to compensate the participants for their loss. [Clarification was sought from Contact on whether this should also apply to a participant breach. Contact confirmed that participants should also be financially exposed to the impact of their actions.]
269	Disagree	Genesis	No, provided the Commission is able to close out at a settlement price if a UTS has occurred.
270	Disagree	M-co	No. Because of the inherent difficulties in determining compensation levels, M-co contends that the Rules should not be extended to accommodate further types of compensation.
271	Disagree	Meridian	If the Commission retains the power to adjust final prices, in many cases this would avoid the need for compensation to be payable. In cases involving breaches of other laws, for example, the Commerce Act, there are appropriate penalties and remedies in those other laws, including relating to compensation.
272	Disagree	Mighty River Power	No.
273	Partially agree	Todd Energy	Todd Energy believes that as a high level principle parties that are adversely affected by rules breaches by other parties should receive compensation or have access to an outcome that is sufficient to put them back in the position that they should have been in should the rule breach not have occurred. This is particularly problematic in relation to service providers who through rule breaches may cause parties significant loss at the same time as also unjustly reward others. Typically, parties that are exposed to risk of loss are able to ensure against that loss but as far as we are aware, parties are not able to insure against loss arising from third parties actions that may through rule breaches affect wholesale market prices. The interim pricing period that provides an opportunity for affected parties to challenge the prices prior to final publication could largely resolve this issue and allow for resolution of material pricing errors that arise as a result of a breach of the rules. This may not provide for all pricing error situations as affected parties may not identify all such situations however, material pricing issues are likely to be subjected to challenges.

Row No.	Agree/ Disagree/ Unclear	Stakeholder	Comment
			With respect to the application of punitive penalties to parties in breach of the rules, Todd Energy does not support punitive penalties but instead prefers a compensation and cost recovery approach.
274	Disagree	Transpower	<p>No. It was decided under the NZEM regime, following a series of drawn out and significant market-impact cases, that requiring a participant to compensate parties for losses would be a form of price recalculation and had the potential to bring the market into disrepute. In other words, an award of compensation would effectively amount to a delayed change to final prices and thereby undermine the certainty from which the industry currently benefits.</p> <p>The present exclusions and limits are a matter of market design – a reflection of a deliberate trade-off between price accuracy and price certainty – which in Transpower's view should not be considered in isolation from all rules relating to final prices.</p> <p>If any change were to be in addition to the current fine and compensation arrangements, service providers' exposure would also have to be given special consideration. Service providers are subject to fixed fee arrangements and, unlike generators, distributors and retailers, are not able to adjust prices to account for risk (outside of periodic fee renegotiation periods).</p> <p>Any rights to award compensation against a service provider must be subject to limitations that would enable the service providers to insure or otherwise make financial provision for the exposure, as is currently done in respect of the existing fines and compensation arrangements.</p>

Question 43: Should there be specific compensation and penalty provisions for UTS events?

Row No.	Agree/ Disagree/ Unclear	Stakeholder	Comment
275	Disagree	Contact	No.
276	Disagree	Genesis	No.
277	Disagree	M-co	See response to question 42.
278	Disagree	Meridian	See response to question 42.
279	Disagree	Mighty River Power	No.
280	Agree	Todd Energy	If parties are found to be in breach of the rules or regulations and parties are found to have suffered loss as a result, then parties that have suffered loss should be able to claim compensation.

Question 44: Should there be compensation for UTS events that do not involve a rule or regulation breach?

Row No.	Agree/ Disagree/ Unclear	Stakeholder	Comment
281	Disagree	Contact	No.
282	Disagree	Genesis	No.
283	Disagree	M-co	See response to question 42.
284	Disagree	Meridian	See response to question 42.
285	Agree	Mighty River Power	Yes. For the avoidance of doubt the UTS Committee may award compensation but they should not be required to.
286	Disagree	Todd Energy	No.

Question 45: Should compensation be payable for problems related to determining final prices?

Row No.	Agree/ Disagree/ Unclear	Stakeholder	Comment
287	Disagree	Contact	No.
288	Disagree	Genesis	No.
289	Disagree	M-co	See response to question 42.
290	Disagree	Meridian	See response to question 42.
291	Agree	Mighty River Power	Yes. The UTS Committee may award compensation in the event where a UTS claim is upheld.
292	Agree	Todd Energy	Yes, although a more elegant solution is to provide affected parties the opportunity to challenge prices prior to final publication so errors can be corrected for. In this way a costly and inefficient compensation process can be avoided by using a process that achieves the right outcome including correcting situations where parties are unjustly enriched as well as those that are injured.

Question regarding next steps

Question 46: Do you have any comments on the indicative timeframes for each initiative outlined above?

Row No.	Agree/ Disagree/ Unclear	Stakeholder	Comment
293	N/A	Genesis	Interim Pricing Process and UTS Review Genesis Energy recommends that development of an interim pricing process should be progressed ahead of

Row No.	Agree/ Disagree/ Unclear	Stakeholder	Comment
			<p>any review of the UTS provisions. If an interim pricing process were in place, it would have implications for the role and operation of the UTS provisions (refer Q35 – 38).</p> <p>Aligning Pricing and Dispatch If final pricing used inputs from the dispatch (SDPQ) schedule, then accuracy of prices would improve (rather than decrease as indicated). This would increase the priority of this initiative.</p> <p>GXP Metering An initiative to improve GXP metering availability to a standard equivalent to that required of generators would significantly improve authoritativeness and accuracy (refer Q17 – 20).</p>
294	N/A	Mighty River Power	We believe the Interim Pricing Period is the most important initiative and should be prioritised.

General Comments

Row No.	Agree/ Disagree/ Unclear	Stakeholder	Comment
295	N/A	Genesis	<p>Genesis Energy:</p> <ul style="list-style-type: none"> ▪ considers “next-day five-minute prices” is the most promising of the five-minute pricing options explored as it would enhance pricing accuracy; ▪ supports introduction of an “interim pricing period” as a mechanism for dealing with pricing errors not severe enough to warrant the UTS process; ▪ believes final pricing inputs should be based on the first feasible dispatch schedule so that pricing accuracy is improved; and ▪ believes grid exit point metering should be required to achieve similar availability standards to generation metering. <p>Supplementary Questions The body of the consultation paper seeks feedback on some issues not covered by the consultation questions. This section responds to two of those supplementary questions.</p> <p><i>NZEM Day-Ahead Market (para 3.9.9)</i> In Genesis Energy’s view, the main reason that the NZEM day-ahead market did not gain support was that it used an Island price. This exposed traders to significant basis risk given that spot pricing used nodal prices. A voluntary day-ahead market would probably attract more activity if it used the same price discovery approach as the balancing market (for example, both zonal, or both nodal).</p> <p><i>Short-Term Hedge Trades (para 3.9.9)</i> In Genesis Energy’s experience, there is strong demand for short-term hedge trades (often driven by planned transmission outages). Genesis Energy is responsive to this demand, but that does not mean that all demand will be satisfied. In some cases, participants will judge that the cost to them of a hedge is less attractive than</p>

Row No.	Agree/ Disagree/ Unclear	Stakeholder	Comment
			<p>accepting exposure to the spot market. This does not necessarily indicate a market failure. It is worth observing however that a strengthened transmission grid would reduce the risk (and hence the cost) of providing short-term hedges.</p>
296	N/A	M-co	<p>M-co is of the view that, by and large, the pricing process works extremely effectively and contends that any changes to the overall process or pricing setting mechanisms should only be undertaken for the purpose of clearing up rulebook inconsistencies or where there is a clear net benefit to the industry. M-co is supportive of changes to allow for an interim pricing period. This is a sensible option that potentially reduces the uncertainty that arises when the Electricity Commission Board orders a delay to final prices because of suspected issues in the data inputs provided into the pricing process. M-co agrees this should also be backed up by greater levels of transparency in the datasets provided to, and used in, the pricing process. M-co however has concern about proposals to redraft the pricing rules. Our view is that while some minor modifications are required, by and large the pricing rules work well. They provide the required level of prescriptiveness necessary for compliance and are understood by those who need to use them on a regular basis. M-co therefore considers that any significant redraft is both unnecessary and poses a higher level of risk of non-compliance.</p>
297	N/A	Meridian	<p>Overall, Meridian considers that the Commission has made a number of useful suggestions. However, Meridian is not convinced that the benefits of moving to five minute pricing are currently justified by the costs. Meridian Supports the Current Rules and Processes Meridian agrees with the Commission's assessment that the "overall the pricing and UTS processes have been working well since the Electricity Governance Rules 2003 (Rules) and Electricity Governance Regulations 2003 (Regulations) came into force on 1 March 2004". While Meridian can see some merit in reviewing these rules and regulations, Meridian does not consider that the Commission has established a good case for the amount of effort that has been expended on this topic. In Meridian's view a much simpler (and less costly) review is likely to have arrived at the same results. A Cost Benefit Analysis is Required Meridian notes that a number of the Commission's proposals, including the move to five minute settlement, have significant cost implications. Meridian submits that the attractiveness of this (and other proposals) in the paper cannot be adequately assessed without knowing the costs and benefits of each. Meridian acknowledges that this work is proposed in latter stages and submits that it must be undertaken before progressing any further. Settlement on 5 minute pricing Meridian supports retaining the status quo that is, next day final pricing. However, where but data is delayed or inaccurate, Meridian supports the use of provisional pricing and a delay in final pricing. In Meridian's view these interim or provisional prices should take no more than two business days to settle. Meridian notes that paragraph 4.3.7 states that there is no mechanism for incorporating price – responsive demand bids into the dispatch process. Meridian considers, however, there is a mechanism for incorporating price. That is, the market is set up for purchasers to bid at a certain price. If purchasers are committed to load management, they can reduce or remove load when the price exceeds their bid price. This can take place under</p>

Row No.	Agree/ Disagree/ Unclear	Stakeholder	Comment
			<p>current arrangements, either with the loads self dispatching or the System Operator could dispatch load off either through their tools or by having a separate system that alerts when loads should be coming off. Meridian queries why this has not been considered?</p> <p>Meridian also queries whether or not the reason for price responsive demand bids not being incorporated into the dispatch process is due to a short coming in the way the System Operator has its' tools configured? That is, discarding local bids in favour of a central forecast. Meridian also submits that the argument in 4.3.10 about constrained on/off payments to generators could also be payments to loads that didn't get dispatched.</p> <p>Settlement on Five Minute Prices</p> <p>Meridian supports the development of five minute pricing and agrees with the Commission's assessment that five minute pricing is likely to deliver benefits in the near to medium term. However, Meridian does not consider that the market is yet ready for the introduction of five minute pricing. This is largely due to the capital expenditure required to invest in new metering equipment involved with such a move.</p> <p>Meridian considers that five minute pricing will be appropriate/cost effective at some point in the future. However, Meridian is concerned that the Commission's current cost/benefit analysis is incomplete. Meridian recommends that a full cost benefit analysis is undertaken before significant further effort is expended on this option. Meridian is willing to work with Commission staff to assist in estimating the indicative costs involved in such a move for a generator market participant.</p> <p>Accuracy</p> <p>Meridian supports retaining the status quo that is, next day final pricing. However, where data is delayed or inaccurate, Meridian supports the use of provisional pricing and a delay in final pricing. In Meridian's view these interim or provisional prices should take no more than two business days to settle.</p> <p>Of the identified attributes, Meridian submits that accuracy is the attribute that the Commission should give priority to. Meridian notes that other attributes can be achieved in more than one way, whereas accuracy relies on good rules and regulations. For example, certainty can be achieved via hedging.</p>
298	N/A	MEUG	<p>The paper covers two groups of proposed changes. First, proposals which are continuous improvement changes to the spot pricing process. We agree the Commission should continue work on these including a more detailed cost-benefit-analysis. Based on the initial analysis in the paper, we agree with the relative ranking of options in table 4 of the paper, ie</p> <ul style="list-style-type: none"> ▪ Top priority for clarifying UTS provisions; ▪ Second equal priority for clarifying the pricing process, having an interim pricing period and improving accuracy of metering information; and ▪ Fifth priority for aligning pricing and dispatch processes. <p>The second group of options considers various 5 minute related prices for settlement prices. These options are designed to overcome "consumption errors" where real time actual demand is either higher or lower than the economically efficient level. However as the report notes there are technical challenges and greater risk of inefficient dispatch of generation and transmission. The settlement on ex ante 5 minute prices option in particular does not appear to warrant more detailed analysis. The ex post options may have some merit but</p>

Row No.	Agree/ Disagree/ Unclear	Stakeholder	Comment
			<p>more detailed analysis is needed. The Commission noted in the paper that¹ “it would be more appropriate to consider this initiative (ie any type of 5 minute based settlement) alongside other potential changes to the design of the pricing process (such as a compulsory day-ahead market or zonal pricing, etc).” MEUG suggest that before proceeding to that step, an analysis of how 5 minute related prices for settlement may have improved the pricing outcomes for the events on 13th February 2009 should be undertaken. If 5 minute prices could have improved certainty and accuracy compared to the current outcome, then further work on those options would be warranted.</p>
299	N/A	Mighty River Power	<p>In summary Mighty River Power views are that:</p> <ol style="list-style-type: none"> a. We do not support settlement on 5 minute prices, as we believe the costs of such changes would outweigh the benefits; b. We do not support the introduction of ex ante pricing. c. We support the introduction of an Interim Pricing Period, and believe this could usefully be used as a mechanism for correcting pricing errors. We believe the introduction of an interim pricing period and the possibility to challenge interim prices will resolve many of the scenarios that have lead to UTSs in the past. d. We believe all market participants should be required to provide accurate metering information and do not believe the Grid Owner should be exempt from such a requirement. e. We support the requirement to update and publish the annual consumption list monthly. We support the idea that the Grid Owner be able to provide and use a reasonable estimate of demand if there is no metering information because we believe this will improve the accuracy of final prices. The methodologies used by the Grid Owner should be published, and be able to be reviewed (in the Interim Pricing Period) in order to increase accuracy and understanding of how estimates were determined. f. We agree that the Electricity Commission should consider removing the requirement for generators to supply metering information to the Pricing Manager. g. We support initiatives to improve clarity of the pricing rules. We also support the publication of processes and inputs used in determining final prices in order to improve clarity of the pricing process. However, the costs outlined seem excessive in comparison to the benefits. h. Mighty River Power believes the current UTS provisions are working well. They cater for unforeseen scenarios that cannot be remedied through any of the other market rules and regulations. The powers the Board has to correct these scenarios are wide ranging, which is appropriate for these scenarios. We believe the UTS rules are clear on how claims can be resolved once a price has been specified for a trade.
300	N/A	Simply Energy	<p>Certainty vs. Accuracy Short run demand side participation would be enhanced by increasing price certainty rather than price accuracy. Large consumers have told us that the current five minute pricing is of little use managing demand side</p>

¹ Refer paragraph 4.1 of the paper.

Row No.	Agree/ Disagree/ Unclear	Stakeholder	Comment
			<p>reductions because:</p> <ul style="list-style-type: none"> ▪ They face certain costs for reducing demand ▪ Five minute prices are considered unreliable, and ▪ Five minute price are frequently returned as infeasible <p>Because we would like to see enhanced participation of demand in the wholesale market we support ex-ante pricing on a five minute basis.</p> <p>Low frequency – high severity events</p> <p>Low frequency – high severity events, for example, the possibility of a spot price of \$100,000 per MWh are not economically useful. They do not underpin investment in generation or demand management because they are so infrequent yet they create fear of ‘unlimited’ exposure to the wholesale market.</p> <p>We would like to see a price cap on settlement prices set to the value of lost load (indexed to inflation), to give end users more comfort on having exposure to the wholesale market with the incentives that this exposure creates to managing demand.</p> <p>Electricity Commission Powers</p> <p>The topology of the electricity system and the geographic concentration of the electricity generators mean the wholesale market can be gamed. Therefore we think it is important that the Electricity Commission has the power to investigate price anomalies, fix problem and impose penalties.</p>
301	N/A	Transpower	<p>Transpower notes that the paper is largely a scoping exercise and, as such, does not provide sufficient information for Transpower to assess in any detail the potential impact of the proposals on its business. As a general comment, Transpower wishes to emphasise the fundamental principle that the spot price of electricity should reflect the marginal cost and notes that this principle underpins all of its responses provided in the submission.</p> <p>Settlement on 5-minute prices</p> <p>Transpower believes that the objective of greater pricing certainty for off- take is commendable, but is concerned that issues such as technical limitations, difficulties with process implementation, and problems with alignment of the rules are likely to make this concept impracticable at the current time.</p> <p>Interim pricing period</p> <p>Transpower agrees that there is merit in improving the procedures for correcting pricing errors and thereby avoiding unnecessary undesirable trading situation claims. Transpower therefore believes that this concept should be investigated further.</p> <p>Alignment of pricing and dispatch processes</p> <p>In Transpower’s view, any change from the current arrangements would be inconsistent with the market design. Therefore, Transpower does not think that this proposal is feasible under the current system.</p> <p>Intermittent generator offers</p> <p>Transpower agrees that the proposed use of metered data from intermittent generators as an offer in the calculation of final prices is worth investigating further.</p> <p>Any changes should relate to “offered” intermittent generation (whether directly connected or embedded). This</p>

Row No.	Agree/ Disagree/ Unclear	Stakeholder	Comment
			<p>will require changes to the demand half-hour metering calculations in Part G Section V Rule 3.3.2.1, and will also require embedded intermittent generators to supply MWh information. Treatment of “unoffered” intermittent generation should remain unchanged.</p> <p>Clarity of the pricing process Transpower has provided a document to the Commission explaining the System Operator's process for resolving infeasibilities and high spring washer price situations and is happy for it to be published on the Commission's website. Transpower would also be happy to answer any specific questions or concerns that participants may have about its processes. Transpower agrees that links to information on pricing inputs should be published, provided that commercial sensitivity is respected. Transpower believes that not only should contradictions and errors in the pricing rules be corrected, but that Part G should be re-drafted in its entirety, especially in light of further proposed market design changes.</p> <p>Undesirable trading situations (UTS) provisions Transpower believes that the current UTS provisions and investigation arrangements are generally appropriate, but that amendments to clarify ambiguities should be progressed. However, Transpower does not agree that the Commission should have the power to direct participants to act in a manner that is inconsistent with the rules and regulations in order to remove a UTS, or that the Rulings Panel should be given the power to award compensation in excess of penalty limits.</p>