

Summary of Submissions

Transmission Pricing Methodology Second Issues Paper

October 2016

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Process

Consultation

Submission	Submitter(s)
1 As a result of the Authority providing insufficient information, parties have faced uncertainty and have delayed commercial decisions. For example, Top Energy has lost a potential new industrial customer to Australia.	Top Energy
2 Parties do not know how they may be affected by the proposals.	Orion
3 Parties do not know how they may be affected by the proposals. The unpredictability of the process itself poses the most risk to NZ Steel's business because NZ Steel is unable to forecast major input costs.	NZ Steel
4 Parties have not been given sufficient information to assess whether the AoB charge will result in charges that reasonably reflect benefits.	Mighty River Power
5 Parties have not been given sufficient information to meaningfully assess the proposals.	Buller Electricity, ENA, Mighty River Power, NZ Steel, Orion, Pacific Aluminium, Top Energy
6 Support the DGPP review and TPM review being undertaken at the same time.	Powerco
7 The Authority could have avoided a situation in which parties have been given insufficient information by arranging for Transpower to develop guidelines in tandem, providing for extra consultation, or amending the guidelines to take into account feedback. It has not done this.	NZ Steel
8 The Authority has compromised its consultation process for the sake of expediency. There has been a lack of visible independent expert advice, no opportunities for cross-submissions, no working parties, and no opportunities for appeal. This is in contrast to similar consultations undertaken by MBIE and the Commerce Commission.	Counties Power
9 The Authority has stated that it will allow at least six weeks for consultation once Transpower submits its TPM. This should be the minimum period allowed. In <i>Air New Zealand v Wellington International Airport Limited</i> , the Court stated that "consultation must allow sufficient time, and a genuine effort must be made".	Business NZ
10 The Authority has used an unhelpful propose/respond approach without feedback on how submitters' responses were evaluated by the Authority.	Trustpower
11 The Authority's consultation process has been open and transparent.	EA Networks
12 The Authority's consultation process has been robust.	E-Type Engineering, Gore District Council, Grey Power Southland, Invercargill District Council , Market South, McIntyre Dick and Partners, Otago Chamber of Commerce, Otago Southland Employers' Association, Preston Russell Law, Sarah Dowie, South Port New Zealand, Southland Chamber of Commerce, Southland District Council, Southland Manufacturers Trust, Stabicraft Marine, Venture Southland

Consultation

Submission	Submitter(s)
13 The Authority's consultation timeframe was too short for parties to meaningfully engage with both the TPM and the DGPP consultations.	Trustpower
14 The Authority should allow cross-submissions. Cross-submissions and (perhaps) a conference are standard procedural steps, and it would be a false economy to skip them.	Transpower
15 The Authority should allow cross-submissions. Some parties identified that it would be particularly useful to consider and respond to Transpower's submission.	Counties Power , ENA, Marlborough Lines, Transpower, Trustpower
16 The Authority should carry out a short consultation after the guidelines are published, in line with the approach taken by the Commerce Commission and other regulators.	Transpower
17 The Authority should have a facilitated discussion with a representative consumer panel involving a range of domestic consumers.	ETNZ
18 The Authority should have co-ordinated its consultation period to avoid overlapping with other consultations (eg, Commerce Commission's IM consultation, EGCC's strategic direction consultation, and fixed-line telecommunication access services). Failure to do this has resulted in submitters needing to make resource trade-offs that they would otherwise have been able to avoid.	Business NZ, Trustpower
19 The Authority should not finalise the guidelines without allowing to take stakeholders an opportunity to provide feedback. The guidelines set the objectives and parameters of the TPM, and as such any unresolved issues must be addressed prior to publishing. There is significant risk in refusing stakeholders the opportunity to provide feedback.	Genesis Energy letter
20 The Authority should seek international expert advice on, and peer review of, its proposals.	Entrust, Powerco
21 The Authority should use a working group/panel of experts in developing the TPM.	Counties Power, EMA, NZ Energy, Top Energy, Trustpower
22 The Authority should withdraw the TPM review, or put the review on hold while it establishes an industry working group.	NZ Energy
23 The Authority should work with the government to seek independent expert peer review of its proposal.	Vector
24 The Authority's proposed 6-week consultation period after the TPM is approved by the Authority is too short, which accentuates the need for consultation engagement in the development of the TPM proposal itself.	Trustpower
25 The consultation period for the second issues paper was too short. There is no statutory reason for a compressed timeframe. The second issues paper is the Authority's formal response to approximately 4,380 pages of submissions and cross-submissions, including 42 expert reports. Given that, the short consultation period indicates that the Authority may not be interested in submitter views. It also may have led to disengagement for less well-resourced submitters. It has led to material prejudice to Trustpower because Trustpower was able to focus on only a few elements of the guidelines, was prevented from commissioning further reports, could not consult with others such as MBIE, could not assess the NZ Inc effects of the TPM, and could not assess a more complete design of an alternative TPM. This is work that the Authority should have commissioned already, and the short timeframe has adversely impacted Trustpower's ability to provide more detailed feedback.	Trustpower

Consultation

Submission	Submitter(s)
26 The consultation period for the second issues paper was too short to determine the answers to questions such as the preferred method for AoB or the method for allocating charges under the simplified and standard methods.	ENA
27 The consultation period was too short. The Authority allowed 10 weeks for consultation rather than the 6 weeks set out in its consultation charter. However, the Authority's proposals is so far outside the norm that the Authority should have allowed a longer consultation period.	Transpower
28 The consultation process does not cover all of the proposed changes to the Code to the level required under the Act.	Counties Power
29 The decisions in response to the second issues paper are very important, so consultation should consist of genuine and proactive engagement with stakeholders, including by using advisory groups, timely feedback to submitters on their submissions and how they are incorporated, identifying and finalising first order issues (such as legal and process issues) before moving on to policy issues, longer consultation periods, and cross-submissions. This will have benefits including more informed decision making, better issues management, improved communications and relationships with industry, quality regulatory outcomes, and reduced implementation risk and improved compliance. The current consultation process is not consistent with the Authority's statutory objective.	Trustpower
30 The implementation of the TPM should be developed in consultation with sector stakeholders.	Business NZ
31 The process set out in chapter 12 may not meet the common law rules regarding natural justice and procedural fairness. Instead, the process should include a working group, a draft decisions paper, workshops, a cross-submission period, and perhaps a further round of consultation. The Authority should also hold a hearing, at which parties who wish to speak to their written submissions and cross-submissions should be permitted to do so.	Trustpower
32 The sequencing of the Authority's approach has prejudiced meaningful consultation. For example, in the second issues paper the Authority made changes to the legal framework, DME framework, and problem definition, introduced new reform objectives of cost-based and service-based pricing, and placed more weight on simplicity and pragmatism. These changes make it difficult to engage meaningfully.	Trustpower
33 To ensure the durability of the proposed TPM the Authority should allow cross-submissions and additional consultation. There is presently a lack of clarity about the direction the Authority will take based on the submissions.	Genesis Energy letter

Development of the TPM

Submission	Submitter(s)
34 Agree with the Authority's proposed process for developing the TPM. In particular, Transpower should consult on the proposed TPM prior to submitting it to the Authority for approval as this will improve the robustness of the TPM, assist in implementation, may engender broad support, and reduce the likelihood that the Authority will need to refer the proposal back. This may reduce delays later.	Meridian
35 It may be possible to implement the TPM by April 2018, given that the proposal will not have a capacity measurement period. A TPM should be implemented no later than April 2019.	Meridian

Development of the TPM

Submission	Submitter(s)
36 It would be inappropriate to delay reform of the TPM due to concerns about ACOT.	Meridian, NERA for Meridian
37 Once Transpower develops the TPM, the Authority does not have the power to substitute its judgement with Transpower's judgement on the actual TPM. The Authority could decide not to re-consult on the same proposal Transpower has consulted on.	Trustpower
38 PwC assessed three potential scenarios for the TPM: a high complexity scenario (significant impacts on the TPM business process, technology and organisational requirements for Transpower, new jobs and technological systems required), a medium complexity scenario (simpler assessment and benefit accounting procedures but similar ongoing FTE impact) and a lower complexity scenario. The Authority's proposal would be a high complexity scenario. The "simplified staged approach" suggested by Transpower would be a moderate complexity scenario. The expected implementation date for a new TPM would be April 2020 under a low to medium complexity scenario and April 2021 under a high complexity scenario.	PwC for Transpower
39 The Authority should complete its TPM review as soon as possible.	TNT2
40 The Authority should conclude its TPM review as soon as possible. Pacific Aluminium sets out a proposed timeline for the Authority to complete its review, which would allow new prices to come into effect on 1 April 2018.	Pacific Aluminium
41 The Authority should conclude the TPM review as soon as possible, to avoid perpetuating inefficiencies.	Business Central, Business NZ, Canterbury Employers' Chamber of Commerce, E-Type Engineering, Gore District Council, Grey Power Southland, Invercargill District Council , Market South, McIntyre Dick and Partners, Meridian, Otago Chamber of Commerce, Otago Southland Employers' Association, Pacific Aluminium, Preston Russell Law, Sarah Dowie, South Port New Zealand, Southland Chamber of Commerce, Southland District Council, Southland Manufacturers Trust, Stabicraft Marine, Todd Barclay, Venture Southland
42 The Authority should implement overlapping stages for implementation. See further PwC for Transpower.	Transpower
43 The Authority should suspend or abandon its current TPM review and should not recommence until it has clear authority to replace the guidelines, under the Act and Code. The Authority should follow the Act and Code and arrange for Transpower to draft the TPM in tandem, consult on the changes necessary to allow for modification of the guidelines, or introduce extra stages in the consultation (with the consent of all parties).	NZ Steel
44 The Authority's timeframes for implementing the TPM are not realistic. The TPM is unlikely to be developed by 1 April 2019.	Top Energy
45 The guidelines should require Transpower to collaborate in developing the TPM. This would allow parties to provide constructive feedback to Transpower and suggest alternatives that have not yet been considered.	Genesis Energy
46 The proposal is likely to result in Transpower spending more time on more upfront work and less time on "system implementation" than the previous proposal, but would still likely take 26-34 months to implement. This is longer than the Authority had assumed.	Transpower

Development of the TPM

Submission	Submitter(s)
47 The TPM development process is inconsistent with the Authority's statutory objective. There is not enough detail in the process proposed by the Authority, particularly in relation to timeframes, consultation, and oral submissions. This undermines the requirement that the issues paper include the process for the development of the TPM.	Trustpower
48 Transpower welcomes the opportunity to meet with the Board regarding submissions and to discuss next steps, including processes and protocols. The dialogue between Transpower and the Authority should respect the fact that Transpower develops a TPM and the Authority assesses Transpower's proposal. Transpower is committed to helping the Authority reach a robust decision and will implement any guidelines smoothly, effectively, and as quickly as possible.	Transpower

Treatment of previous submissions

Submission	Submitter(s)
49 It is good that the Authority has listened to feedback from submitters.	E-Type Engineering, Gore District Council, Grey Power Southland, Invercargill District Council , Market South, Marlborough Lines, McIntyre Dick and Partners, Mighty River Power, Otago Chamber of Commerce, Otago Southland Employers' Association, Pacific Aluminium, Preston Russell Law, Sarah Dowie, South Port New Zealand, Southland Chamber of Commerce, Southland District Council, Southland Manufacturers Trust, Stabicraft Marine, TNT2, Unison , Venture Southland
50 It is good that the Authority has listened to feedback from submitters. For example, the Authority has moved from SPD to AoB in response to gaming concerns.	Meridian
51 The Authority has developed its proposals without stakeholder input. This has resulted in proposals that do not address key concerns and that are different from each previous proposal.	Top Energy
52 The Authority has failed to take into account/respond to submissions made in previous rounds of the consultation process, including expert submissions.	Vector
53 The Authority has failed to take into account/respond to submissions made in previous rounds of the consultation process.	Entrust, Mighty River Power, Top Energy, Trustpower

Other

Submission	Submitter(s)
54 It is frustrating that each successive issues paper raises a new set of solutions, instead of getting closer to a final resolution.	Pan Pac

Other

Submission	Submitter(s)
55 It is not good regulatory practice to radically change regulatory settings (for example, through removing the DGPPs and peak-based pricing) unless the benefits are clear, demonstrable and material, which has not been established.	Infratil
56 Now is a good time to reform the TPM, despite the low short-term investment outlook. That is because investment needs can change quickly, and it may be easier to change the TPM at this stage than later.	Meridian
57 The Authority has gone into the process with an end result in mind and has reverse-engineered its desired outcome.	AD Harwood
58 The Authority is not following good regulatory practice - for example, by replacing the RCPD charge with charges that are not especially cost-reflective or service-based.	ENA
59 The Authority's power to amend the Code is under section 32(1) of the Act, which has a "necessary or desirable" test. The power to amend the Code does not focus on, or refer to, the long-term interests of consumers. That means weight should be given to retaining the status quo. It also follows that the Authority's DME framework is based on a misconception of the Authority's mandate and should be set aside.	Trustpower
60 The Authority's views in its proposal mirror the views of the Chair of the Authority, who unsuccessfully advocated for them in relation to the current TPM. This, combined with a theoretical nature of the Authority's decision-making and failure to proactively share reasons for its decision, indicates that has not taken the steps to ensure that its analysis is objective and fair to all market participants. To mitigate this, the Authority should use cross-submissions, advisory groups, and expert studies.	Trustpower
61 The Competition and Markets Authority in Great Britain recently made regulatory changes that increased efficiency and competition. In doing so, the Competition and Markets Authority considered and rejected a wide range of objections. Such objections are to be expected as part of a transition to a more appropriate TPM.	Stephen Littlechild for Meridian
62 The government (eg, MBIE) should review the Authority's proposal. The Authority's statutory objective does not include a consideration of wider socio-economic impacts, and these need to be considered.	Air Liquide, Counties Power , Counties Power Consumer Trust , EMA, Molly Melhuish, North Tec
63 The process is unlawful and flawed. Further submissions on this are included in the Franks Ogilvie opinion.	NZ Steel
64 The protracted process for the TPM review has been a waste of resources and has undermined regulatory certainty in the electricity sector.	Powerco
65 Transpower has expressed doubt in the Authority's timeline, so the Authority should proceed with caution and revised its proposed change process.	Genesis Energy letter

Material change in circumstances

Submission	Submitter(s)
66 Changes in computational power is an unsound reason for a material change in circumstances. If improvements in computational power were an accepted material change in circumstances, this would make the threshold for review very low. Computational power has no effect on the conceptual issues. For example, it does not mean that it is easier to establish the beneficiaries within an interconnected grid. Deviances in computational power open up new pricing options, but a more complex allocation methodology is not necessarily superior.	Trustpower
67 If the Authority finds a material change in circumstances, this cannot trigger to a wholesale review of the TPM. The change in circumstances need to be tied back to consistency with the statutory objective, Part 4 determinations, and the TPM guidelines.	Trustpower
68 New investment is not a material change in circumstances. It is not clear why a TPM that is considered an efficient way to recover regulated revenues of \$500M is no longer efficient to recover revenues of \$1B.	Trustpower
69 New investment is not a material change in circumstances because the need for, and level of, investment was known to the Electricity Commission at the time the current TPM was made.	Trustpower
70 Once the material change in circumstances threshold has been met, the Authority is not limited to reviewing only the aspects of the TPM in respect of which the material change in circumstance has arisen. The requirement in clause 12.86 of the Code, that the Authority may review an approved TPM if there has been a material change in circumstances, does not fetter the Authority's ability to amend the Code generally, outside of any constraints that might be imposed by clause 12.86.	Meridian
71 The Authority does not have express power to revise the guidelines. The existing guidelines are permanent, and the Code does not provide for them to be revised.	NZ Steel
72 The Authority has failed to consider the material change in circumstances threshold at the beginning of the TPM review process. This suggests that the Electricity Commission's original review of the TPM, and the Authority's continuation of that review, were driven by other considerations than a material change in circumstances.	Trustpower
73 The Authority has not adequately identified a material change in circumstances as required under the Code.	Powerco
74 The Authority should undertake a market study on technology to support its material change in circumstances, consistent with Australian and UK practice. For example, Ofgem's Flexible Grid regulatory framework is more appropriate for the material changes and higher levels of technology substitution to traditional monopoly providers.	Pioneer
75 The Authority's new statutory objective is not a material change in circumstances. There is no causal nexus between a new regulatory framework and the current TPM becoming inefficient. The changes in the Authority's statutory objective had no effect on the TPM. The current TPM guidelines were developed to be firmly based on the most efficient TPM that could practicably be developed, which is the same principle guiding the Authority. It is also immaterial that grid investment approvals were transferred to the Commerce Commission.	Trustpower

Submission	Submitter(s)
76 The Authority's review of the TPM is constrained by the guidelines, just as Transpower's review is constrained by the guidelines. Clause 12.87 requires the Authority to take into account the current TPM guidelines when conducting a TPM review, which suggests that both reviews are operational in character.	Trustpower
77 The material change in circumstances threshold has to be read in the context of clause 12.87, which requires consideration of the guidelines. The purpose of a TPM review is to fine tune the TPM within the constraints of clause 12.89(1). In that light, the material change in circumstances threshold is designed to ensure regulatory stability, suggesting that changes in circumstances are only material if they significantly impact the TPM meeting the objectives. This suggests that the TPM review itself cannot go beyond the TPM guidelines and suggest new pricing objectives.	Trustpower
78 There has been a material change in circumstances for the reasons set out in the second issues paper.	E-Type Engineering, Gore District Council, Grey Power Southland, Invercargill District Council , Market South, McIntyre Dick and Partners, Meridian, Otago Chamber of Commerce, Otago Southland Employers' Association, Preston Russell Law, Sarah Dowie, South Port New Zealand, Southland Chamber of Commerce, Southland District Council, Southland Manufacturers Trust, Stabicraft Marine, Todd Barclay, Venture Southland
79 There has not been a material change in circumstances for the reasons set out in PwC's submission on the options working paper.	PwC for 14 EDBs

Interpretation of statutory objective

Submission	Submitter(s)
80 Some submitters have stated that the Authority cannot consider efficient investment, because this is dealt with through the Commerce Commission's regulatory regime. However, it is within the Authority's statutory objective to consider efficient investment.	Meridian
81 The Authority appears to be making decisions with equity in mind, which is a subjective consideration that is inconsistent with the Authority's statutory objective.	EA Networks
82 The Authority has properly defined its statutory objective.	E-Type Engineering, Gore District Council, Grey Power Southland, Invercargill District Council , Market South, McIntyre Dick and Partners, Otago Chamber of Commerce, Otago Southland Employers' Association, Preston Russell Law, Sarah Dowie, South Port New Zealand, Southland Chamber of Commerce, Southland District Council, Southland Manufacturers Trust, Stabicraft Marine, Venture Southland
83 The Authority is bound by the provisions in the Code regarding the development of TPM guidelines and the TPM. Contact Energy v Electricity Commission suggests that once published, the TPM guidelines are final and not capable of amendment under the legislative framework, unless the regulatory framework is itself amended. The Authority's TPM review does not comply with its published guidelines, which are permanent under the Code as drafted.	Trustpower
84 The Authority's focus on promoting efficient competition and efficient levels of reliable supply is appropriate.	Meridian
85 The Authority should place more emphasis on the reliability limb of its statutory objective. Reliability is a mandatory consideration for the Authority. The Authority has given inadequate consideration to reliability in its analysis. Neither has it indicated a trade-off between reliability and the other limbs of the statutory objective. The TPM proposal could lead to parties opposing reliability investments that would otherwise benefit consumers. This risk needs to be factored into the TPM.	Mighty River Power
86 The Authority should place more emphasis on the reliability limb of its statutory objective. This may involve using the TPM to create incentives to build too early rather than too late.	Auckland's Heart of the City , Newmarket Business Association , Onehunga Business Association, South Harbour Business Association

Decision-making

DME framework

	Submission	Submitter(s)
87	Do not support the DME framework for the reasons raised in an earlier paper, including that the DME framework raises the risk of conflicting objectives for decision-making.	CEC for Trustpower
88	The Authority has come to very different options from the same DME framework. This undermines the credibility of the Authority's proposals.	NZ Steel, NZIER for MEUG, Trustpower
89	The DME framework is not a helpful tool for decision-making. It does not provide a tool for assessing options. It results in options being higher ranked on the DME framework, even if they would not be beneficial on a CBA test. It divorces the identification of the problem from determining a solution.	Trustpower
90	The DME framework is not principled. There are no pricing principles attached to the TPM, just a hierarchy of preferred allocation approaches. The Authority should adopt the distribution pricing principles.	ENA
91	The DME framework is useful for identifying and evaluating different options.	Meridian
92	There are issues regarding the DME framework. Refer to previous submission by Marlborough Lines.	Marlborough Lines
93	The removal of the pricing principles was intended to remove duplication and unnecessary regulation. It is difficult to reconcile the removal of the pricing principles with the creation of the DME framework.	Trustpower

Service-based and cost-reflective pricing

	Submission	Submitter(s)
94	Agree with the Authority that cost-reflective and service-based pricing is important, and that it shows that the current TPM does not meet the Authority's statutory objective.	Pacific Aluminium
95	A service-based approach may not be appropriate, because service levels are chosen with a 50-year timeframe in mind, resulting in service levels that are higher than that desired by end-users.	KiwiRail
96	Charging Auckland/Northland is not service-based charging, because they have not in fact seen improvements in reliability and/or quality of supply.	Air Liquide, Northpower, Top Energy, Vector
97	Charging Northland for recent investments would not be service-based, because Northland does not benefit. The benefits are to Auckland only.	Top Energy, North Tec, Northland Mayoral Forum, Northpower, TECT
98	It is not fair, principled, or in the long-term benefit of consumers for consumers in some regions to pay more in transmission charges to benefit large generators and corporations. Transmission should be funded equally by all users of the grid.	411 consumers via Entrust, Entrust, Pacific Leadership Forum
99	It is not possible to have completely cost-reflective charges, so all allocations of costs are a judgement regarding allocation mechanisms. The proposed mechanism is simpler than previous proposals, but not better than the status quo.	ENA

Service-based and cost-reflective pricing

Submission	Submitter(s)
100 Service-based and cost reflective pricing is a useful concept. It is good that the Authority has agreed that charges can be seen as a payment for a service that can be provided by assets of varying ages and types without having a different price. This thinking can be extended to interconnection assets.	Orion
101 Service-based and cost-reflective pricing will only exacerbate the existing "economic sizing" issues in the grid. Instead, the Authority should retain peak-based charges.	Pioneer
102 Service-based pricing is an unhelpful concept, because Auckland does not receive a higher quality of service than other parts of New Zealand. The upgrades support reliability in the whole of the country.	Entrust
103 Support charging those who benefit.	Winstone Pulp
104 Support cost-reflective and service-based pricing, as this will lead to more efficient investment decisions.	Canterbury Employers' Chamber of Commerce, E-Type Engineering, Gore District Council, Grey Power Southland, Invercargill District Council , Market South, McIntyre Dick and Partners, Nicholas Brown, Otago Chamber of Commerce, Otago Southland Employers' Association, Preston Russell Law, Sarah Dowie, South Port New Zealand, Southland Chamber of Commerce, Southland District Council, Southland Manufacturers Trust, Stabicraft Marine, Venture Southland
105 Support cost-reflective and service-based pricing, which will promote the long-term benefit of consumers.	Business Central
106 Support cost-reflective and service-based pricing. There will be inevitable trade-offs in applying this, and the focus should be on solving the most significant and high-value problems.	Meridian
107 Support cost-reflective pricing, as this will lead to efficient investment decisions. It would not be principled to compromise cost-reflective pricing to benefit large numbers of consumers in more heavily populated regions.	Tenon Manufacturing Limited
108 The Authority appears to have elevated the two additional components of the DME framework above the original DME framework. The Authority should be using the DME framework to assist in identifying options, not for comparative evaluation or as a proxy for the Authority's statutory objective.	Powerco
109 The Authority has failed to take into account the notion of choice in its treatment of service-based pricing.	ENA
110 The Authority's approach of service-based and cost-reflective pricing is consistent with the characterisation of competition as a dynamic process and acknowledges the practicalities of actual markets. In particular, the Authority's proposals promote dynamic efficiency because they represent the evolution of markets towards more competitive and efficient arrangements.	Stephen Littlechild for Meridian
111 The Authority's approach to service-based pricing does not reflect the nature of electricity transmission, in particular, the large amount of shared services in the interconnected grid.	Unison , ENA
112 The Authority's focus on service-based and cost-reflective pricing is appropriate from an economics perspective. It is not enough that a price is above incremental costs but below the stand alone cost. There is further economic value in attempting to allocate costs in proportion to benefits.	NERA for Meridian

Service-based and cost-reflective pricing

Submission	Submitter(s)
113 The Authority should not introduce a service-based component. Instead, it should focus on the efficient recovery of sunk costs and signalling the costs of grid expansions. The Authority should adopt the distribution pricing principles.	Unison
114 The Authority's review is inconsistent with other government policy, where a national access price is used (for example, ultra-fast broadband).	Vector
115 The Authority's service-based and cost-reflective pricing methodology needs to focus less on discrete investments and more on how the system as a whole works. The benefits of transmission assets can be subtle and indirect. For example, Pole 3 of the HVDC link has improved frequency keeping and reserve procurement.	Orion
116 The Authority's use of the concept of "components" when discussing service-based charging indicates that the elaboration of the DME framework is, in reality, "asset-based" pricing, not "service-based" pricing. The DME framework elaboration is, therefore, a restatement of the beneficiaries-pay principle from the original DME framework. Further, it elevates the beneficiaries-pay principle above the other principles in the DME framework. This means that the Authority has given up on forward-looking signals, which is not an efficient approach. A forward price signal should be retained.	CEC for Trustpower
117 The best TPM recovers sunk costs with minimum distortion - that is, impacts the least on consumption, generation and investment decisions.	Entrust
118 The DME framework should include a consideration of the difference between efficient marginal prices and efficient infra-marginal prices. The problems that the Authority has identified arise from inefficient infra-marginal prices, not inefficient marginal prices. The implications of including efficient infra-marginal prices in the Authority's elaboration of the DME framework are that it confirms that service-based and cost-reflective pricing increases infra-marginal efficiency so there would be no theoretical basis for distinguishing between existing and new assets because efficient infra-marginal prices convey information about costs including fixed costs. "Optimal lump sum" approaches will be relevant for cases in which there is no benefit or services provided (eg, optimisation) but not for other prices. Market-like prices do not require prices to be "perfect". Incremental and standalone concepts are the boundaries of efficient prices, not guides to efficient prices.	Pacific Aluminium
119 The proposals will lead to businesses in some regions paying more in transmission charges, which may lead to businesses struggling, but it is not appropriate to shield businesses or consumers from the true cost of services.	Business NZ
120 The proposals would lead to businesses in some regions paying more in transmission charges, which will lead to negative flow-on economic effects for regional economies.	Northland Mayoral Forum
121 The proposed TPM does not resolve the issue of customer service levels and location. Non-core grid connected customers do not receive services for which they are to be charged under the proposed TPM. This is inconsistent with the concept of service-based pricing. Instead, service-based charges could be incorporated into a nodal-based charge methodology that would identify constraints in non-core interconnection assets, and assign core grid investment costs to customers that benefit. This would enable both generation and offtake customer charges to be better aligned, and would be more service-based and cost-reflective.	Network Waitaki

Service-based and cost-reflective pricing

	Submission	Submitter(s)
122	The service-based approach should recognise the fact that transmission services are not the same everywhere. This is a key element of service-based pricing.	Orion
123	The TPM review is not the right place to address social policy issues relating to energy poverty.	Gore District Council, Invercargill District Council , Southland District Council, Venture Southland
124	The TPM should offer, as far as possible, choice relating to the quality of service received, and the price paid should be commensurate with the quality of service provided.	ENA, Waipa Networks
125	Transmission costs should be recovered using a broad-based, low level, and non-discriminatory allocation, as this is the least distortionary approach.	Powerco
126	Transmission should be funded equally by all users of the grid, because a cost plus pricing method will lead to future over-investment and infrastructure.	Refining NZ
127	Transmission should be funded equally by all users of the grid.	Advanced Management Systems Limited, Northland Inc
128	Transmission should be funded equally by all users of the grid. Consumers in Auckland and the upper North Island should not be paying for a wealth transfer to large profitable electricity generators.	Auckland's Heart of the City , Newmarket Business Association , Onehunga Business Association, South Harbour Business Association
129	Transmission should be funded equally by all users of the grid. The service received is the same for each user regardless of location.	EMA, Federated Farmers, Fletcher Building, Northland Mayoral Forum, Refining NZ
130	Transmission should be funded equally by all users of the grid. This supports economic and/or social development in regional and provincial areas.	Counties Power Consumer Trust
131	Transmission should be funded equally by all users of the grid. This supports economic and social development in regional and provincial areas.	Fletcher Building
132	Transmission should be funded equally by all users of the grid. Transmission is national infrastructure and should be treated as such.	Auckland Federated Farmers, Counties Power , EMA, Ruapehu District Council
133	Transmission should be funded equally by all users of the grid because parties have made decisions on the basis that transmission costs would be shared equally.	Auckland Federated Farmers
134	Transmission should be funded equally by all users of the grid to disincentivise parties in regional areas from exiting the grid.	Fletcher Building

Alternative approaches

	Submission	Submitter(s)
135	The Authority needs to include fundamental impacts such as wealth transfers, impact on regional development, risk of security to supply, and economic distortions.	Vector
136	The Authority should adopt the distribution pricing principles (prices should create certainty, be transparent, promote price stability, and have regard to the impact on stakeholders).	Alpine Energy, ENA, Unison
137	The Authority should take into account environmental impacts, for example, the environmental impact of not incentivising efficient energy.	Refining NZ

Alternative approaches

	Submission	Submitter(s)
138	The Authority should take into account the social impacts of the proposal, for example, the social impact on regions such as Northland.	Auckland Airport, Northland Mayoral Forum, Refining NZ

Problem definition

Not sufficiently service-based or cost-reflective

Submission	Submitter(s)
139 Agree that the current TPM is not cost-reflective and does not drive efficient investment decisions.	E-Type Engineering, Gore District Council, Grey Power Southland, Invercargill District Council , Liz Craig, Market South, McIntyre Dick and Partners, Otago Chamber of Commerce, Otago Southland Employers' Association, Preston Russell Law, Sarah Dowie, South Port New Zealand, Southland Chamber of Commerce, Southland District Council, Southland Manufacturers Trust, Stabicraft Marine, Todd Barclay, Venture Southland
140 Agree with the Authority that the current TPM does not meet the Authority's statutory objective as it is not cost-reflective and service-based.	Pacific Aluminium
141 Agree with the Authority that there are problems with the HVDC charge. The HVDC charge is arbitrary and unfair. There is no reason to single out South Island generators or HVDC assets for different charges. The HVDC link also benefits North Island generators and load. The charge is inefficient because it distorts the build merit order of new investment. The Authority has identified a quantified inefficiency for the HVDC link, which is only part of the inefficiency, because there are other flow-on inefficiencies. See further Professor Littlechild for Meridian.	Meridian
142 It is a problem that the current TPM is not service-based or cost-reflective.	PowerNet
143 The 110 KV transmission line between Waitaki and Glenavy is not subject to the N-1 criterion. Capacity constraints in the line have led to significant challenges with supply including voltage stability and thermal overloading issues. However, no investment will be made by Transpower in the line interconnection assets unless the N security rating is compromised. This is a problem. The service-based criterion needs to take into account these kinds of service quality differences in the grid.	Network Waitaki
144 The Authority has identified that price signals are too strong. That being the case, any inefficiencies in the use of the grid would be under-utilisation, which would delay the need for transmission investments, not bring them forward. The solution should be to correct the price signal, not to remove it.	Powerco
145 The Authority has stated that some direct consumers pay more than the total cost of supplying them (eg, NZAS). If this is the case, the prudent discount policy should be amended, rather than changing the whole TPM.	KiwiRail
146 The Authority has stated that the TPM sends the wrong price signals, due to not being service-based or cost-reflective. However, the peak-based signals in the current TPM lead to efficient grid investment.	Air Liquide
147 The Authority should take into account of the fact that the existing HVDC charge incentivises demand-side options.	ETNZ

Not sufficiently service-based or cost-reflective

Submission	Submitter(s)
148 The current TPM does a sound job of sending efficient price signals, while providing for revenue adequacy and recovery of fixed costs in a non-distortionary way. The history of the development of the TPM indicates that it is not possible to design a workable TPM to perfectly signal both efficient short-term and long-run costs.	Girdwood Consulting for Trustpower
149 The current TPM does provide efficient price signals for use. Fifty years of engineering efficiency based on peak-based signals has flattened the demand curve, which is efficient.	Pioneer
150 The current TPM is not durable because it is not service-based and cost-reflective. It will become less and less durable over time.	Stephen Littlechild for Meridian
151 The only valid problem with the TPM is in relation to the HVDC link. It could be worth considering a more robust LRMC or peak-usage price signal to address this issue, and/or by widening the scope of the charge to include other beneficiaries of the link.	Powerco
152 The problem definition does not indicate that the concerns that the Authority have are more granular than a regional level. That, combined with the difficulty of allocating benefits in the granular fashion, means that it might be better to use a regional or zonal approach.	Transpower
153 The problem definition does not take into account the fact that if there are incentives for over investment and under investment (as is the case with the current TPM), those incentives need to be netted off.	Trustpower
154 Transpower's operational review has addressed problems with the HVDC link, so there may not be problems with the HVDC link.	Axiom for Transpower, NZIER for MEUG

Inefficient participation in grid investment process leading to inefficient investment

Submission	Submitter(s)
155 Agree that the current interconnection charges are not fair or efficient, because they not service-based or cost-reflective.	Meridian
156 Agree that the current TPM is not cost-reflective and does not drive efficient investment decisions.	E-Type Engineering, Gore District Council, Grey Power Southland, Invercargill District Council , Liz Craig, Market South, McIntyre Dick and Partners, Otago Chamber of Commerce, Otago Southland Employers' Association, Preston Russell Law, Sarah Dowie, South Port New Zealand, Southland Chamber of Commerce, Southland District Council, Southland Manufacturers Trust, Stabicraft Marine, Todd Barclay, Venture Southland
157 Planning efficiency is clearly the role of the Commerce Commission, which has the obligation to ensure efficient investment in, and recovery of costs for, transmission services. The Commerce Commission's regime has been designed to provide rigorous scrutiny of these matters. Further, there is a review process to ensure that the Commerce Commission process continues to meet Parliament's objectives.	Girdwood Consulting for Trustpower
158 The Authority has not considered the role that changes to the input methodologies may play in improving decision-making. The Authority is over-reaching in this area.	Orion

Inefficient participation in grid investment process leading to inefficient investment

Submission	Submitter(s)
159 The Authority has not established that the TPM is in fact causing inefficient investment. The Commerce Commission makes decisions about investments based on its regulatory process. Parties do not have the expertise to submit on transmission investment proposals. Participating in the grid investment proposals process will be expensive for parties. The information asymmetry problem faced by the Commerce Commission would apply regardless of whether parties face higher transmission costs or not.	Fonterra
160 The Authority has not presented evidence that inefficient investments have been made under the current TPM. This indicates that there may not be a problem with the current investment approvals process.	EA Networks, Pioneer
161 The Authority's own graphs/analysis show that there are clear benefits from investments, which indicates that inefficient investment is not a problem, or is not as large a problem as the Authority claims.	ENA, Orion
162 The Authority's own graphs/analysis show that there are clear benefits from recent investments, which indicates that inefficient investment is not a problem, or is not as large a problem as the Authority claims.	Trustpower
163 The concerns regarding better scrutiny of transmission investments are overstated.	PwC for 14 EDBs

Durability

Submission	Submitter(s)
164 The ability to fine-tune the existing TPM by changing the value of N is an indication of its durability, not an indication of a problem.	Powerco
165 The concerns regarding durability are overstated.	PwC for 14 EDBs
166 The current TPM is durable. Any lobbying is by a very small minority.	Air Liquide
167 The current TPM is not robust or durable.	E-Type Engineering, Gore District Council, Grey Power Southland, Invercargill District Council , Market South, McIntyre Dick and Partners, Otago Chamber of Commerce, Otago Southland Employers' Association, Preston Russell Law, Sarah Dowie, South Port New Zealand, Southland Chamber of Commerce, Southland District Council, Southland Manufacturers Trust, Stabicraft Marine, Venture Southland
168 There are durability problems with the current TPM that mean that the current TPM cannot be sustained. The Authority's proposals address these problems.	Meridian

Other

Submission	Submitter(s)
169 Agree with the Authority that there are inconsistencies in the way connection charges are calculated across New Zealand. This is an equity issue.	Waitaki Power Trust

Other

Submission	Submitter(s)
170 It is a minimum requirement of best regulatory practice to identify a significant and enduring problem. The small number of legitimate problems identified in the issues paper could be addressed through modest incremental reform.	EA Networks
171 Parties have submitted that a high burden of proof is required before changes are made to the TPM. However, while this would be desirable, it is not always easy to demonstrate or quantify long-term benefits. Therefore, it is adequate for the Authority to assume that arrangements that promote a more competitive market will bring long-term benefits to consumers.	Stephen Littlechild for Meridian
172 The Authority appears to be basing its problem on an equity issue between regions, rather than an efficiency issue. Some submitters were of the view that the proposed solutions would shift, rather than remove, concerns about equity.	EA Networks, ENA, Trustpower
173 The Authority has defined the problem with the current TPM.	E-Type Engineering, Gore District Council, Grey Power Southland, Invercargill District Council , Market South, McIntyre Dick and Partners, Otago Chamber of Commerce, Otago Southland Employers' Association, Preston Russell Law, Sarah Dowie, South Port New Zealand, Southland District Council, Southland Manufacturers Trust, Stabicraft Marine, Todd Barclay, Venture Southland
174 The Authority has not established that there is a material problem with the current TPM.	Powerco
175 The Authority has overstated problems with the status quo. For example, the effect of the RCPD and HVDC signals being too strong were estimated at 2.5% of revenue for the TPM as a whole and 0.77% for the HVDC link. It is therefore surprising for the Authority to say that the TPM is "fundamentally inconsistent with the principles of efficient pricing".	Transpower
176 The Authority needs to factor security of supply into its problem definition.	Pioneer
177 The Authority's example regarding undergrounding is a poor one because, while undergrounding may be uneconomic when viewed from Transpower's perspective, it is efficient when the cost of land is taken into account.	Newmarket Business Association , Onehunga Business Association, South Harbour Business Association
178 The Authority's problem definition is qualitative, not quantitative. This means that the difference between the proposal and the status quo is defined by a set of selected expected effects. This will generate a circular argument if potential consumer responses to charges cannot reliably be modelled (which may be the case).	NZIER for MEUG
179 The Authority suggests that the HVDC charge should be discontinued because South Island generators are opposed to it. This is not a reasonable justification for a major change that indicatively has minimal net benefit.	Winstone Pulp
180 The current TPM was designed to promote efficiency objectives by incentivising reliability investments because nodal prices under estimate reliability outcomes, leaving the responsibility for efficient transmission investment to the Commerce Commission, and sending efficient price signals that reflect the Ramsay pricing principles. The Authority's first step in a TPM review should be to understand the extent to which the current TPM guidelines have delivered materially inefficient outcomes such as adverse impacts on competition, poor locational signals, and inefficient use. The Authority has failed to do this.	Trustpower

Other

	Submission	Submitter(s)
181	The problem definition has not been substantiated with evidence.	Pioneer
182	The problem definition is inadequate to make significant changes to the TPM. There is a lack of quantification in the problem definition. Combined with the use of the DME framework, it is not clear what should happen if the beneficiaries-pay proposal is unworkable.	Trustpower
183	The problems identified by the Authority and its problem definition are theoretical critiques, not practical or realistic issues. For example, the heat map is based on a per MW hour basis, but a heat map on cost per MW of coincident peak demand would (as expected) show a true postage stamp charge, and a heat map based on nodal prices would show lower prices in locations that are near large basis of generation.	Trustpower
184	Transpower's operational review has indicated that there are no durability problems with the existing TPM.	Northpower
185	Transpower's operational review has resolved many of the issues of the current TPM. Removing the DGPPs (with some grandfathering) would address the issue that the current RCPD charge may incentivise inefficient use.	Northland Inc

Connection charge

	Submission	Submitter(s)
186	Agree with using average historical costs for connection charging, for the reasons set out by the Authority.	Meridian
187	Support the current connection charge methodology.	Meridian, Nova Energy, PowerNet, PwC for 14 EDBs
188	The current connection charge methodology is cost effective, avoids price shocks, and is well understood.	PowerNet, PwC for 14 EDBs
189	There is little to be gained by adding additional complexity to the connection charge methodology.	Nova Energy

AoB charge

Eligible investments for the AoB charge

Submission	Submitter(s)
190 Agree that the eligible investments should include the nominated historical assets.	Oji Fibre Solutions
191 All assets that make up the grid should be charged on the same basis, reflecting the value of the asset, rather than splitting assets into area of benefit and residual charges. Competitive markets do not make price-based distinctions based on the age of the plant.	EMA
192 All historical assets should be included in the AoB charge. The 2004 cut-off is not efficient, introduces time inconsistency, and is unfair because it results in charges that are not cost-reflective.	Pacific Aluminium, Unison
193 All historical assets should be included in the AoB charge. The justification for excluding pre-2004 assets from the AoB charge no longer applies.	Contact Energy
194 Do not support the AoB charge in any form but if it is progressed the \$50m threshold should be removed. There is no need to apply a threshold to the investment size for the AoB charge.	ENA
195 Elements of the sub-transmission system should be included in the AoB charge. Spreading non-core grid charges across all customers will present an economic barrier to the purchase of non-core grid by regional distribution businesses. Including elements of the sub-transmission system in the AoB charge will also improve investment efficiency and operational efficiency, because it would give Transpower opportunities to divest non-core grid assets and focus on core assets. It may simplify the operational boundaries between Transpower and distributors, and may stimulate efficient rationalisation of distribution businesses.	Pacific Aluminium
196 Historical investments should be included in the AoB charge, to avoid some consumers paying a socialised share of previous major investments they may not have benefited from as well as a targeted share of possible new investments that they do benefit from.	Nova Energy, Venture Southland
197 Historical investments should be included in the AoB charge.	Gore District Council, Invercargill District Council , Southland District Council
198 Historical investments should be included in the AoB charge. If the AoB charge was applied to new assets only, this would be confusing and burdensome and set an undesirable precedent.	Stephen Littlechild for Meridian
199 Historical investments should be included in the AoB charge. If the AoB charge was applied to new assets only, this would entrench present inefficiencies and durability concerns, create a parallel TPM (creating mixed signals), would "double dip", would be complex, would create an uneven playing field, and would amount to grandfathering previous beneficiaries (an outcome for which there is no precedent). Parties should reasonably expect that changes to the TPM will be applied to old and new assets. The fact that half of the benefits of the CBA relate to existing assets reinforces the need to apply the proposed TPM to new and existing assets.	Meridian
200 Historical investments should be included in the AoB charge because it would be more durable.	Meridian
201 Historical investments should be included in the AoB charge because it would be more efficient.	Meridian, NERA for Meridian
202 Historical investments should not be included in the AoB charge, because doing so will increase lobbying.	Auckland Airport

Eligible investments for the AoB charge

	Submission	Submitter(s)
203	Historical investments should not be included in the AoB charge, because doing so will lead to unexpected costs for parties.	KiwiRail
204	Historical investments should not be included in the AoB charge, because doing so would be arbitrary.	Air Liquide, Top Energy
205	Historical investments should not be included in the AoB charge, because doing so would ignore the fact that the investment in the Upper North Island will create growth, ignores significant transmission revenue already collected from the Upper North Island, and charges the Upper North Island for poor investment decisions made by Transpower.	Counties Power
206	Historical investments should not be included in the AoB charge, because doing so would negatively impact on durability.	Mighty River Power
207	Historical investments should not be included in the AoB charge, to avoid the retrospective reallocation of sunk costs. Applying the charge to new assets only would send the right price signal.	PwC for 14 EDBs
208	Historical investments should not be included in the AoB charge.	Northland Mayoral Forum, Orion
209	Historical investments should not be included in the AoB charge. Doing so skews grid costs onto Upper North Island users.	Mighty River Power, Vector
210	Historical investments should not be included in the AoB charge. Doing so will create a large wealth transfer in relation to the HVDC link that will lead to static efficiency losses, and reductions in investor confidence.	EA Networks, Mighty River Power
211	Historical investments should not be included in the AoB charge. Doing so would be retrospective and would not be good regulatory practice.	TECT
212	Historical investments should not be included in the AoB charge. The Authority should have taken on board significant feedback from participants regarding this issue.	Northpower
213	Historical investments should not be included in the AoB charge. The inclusion of recent Upper North Island investments is based on an equity argument phrased as an efficiency argument.	Counties Power , Mighty River Power, Top Energy
214	Historical investments should not be included in the AoB charge because doing so would create significant uncertainty resulting in a chilling effect on investment, and a higher cost of capital.	EA Networks, Entrust, Top Energy
215	Historical investments should not be included in the AoB charge because including historical assets would lead to opportunities to avoid payment for the sunk assets.	Top Energy
216	Historical investments should not be included in the AoB charge because it would not result in efficiency benefits and/or could lead to efficiency costs (eg, allocative efficiency costs in relation to the HVDC link).	Counties Power, EA Networks, Entrust, Mighty River Power, Morrison Law for Pioneer, Top Energy
217	If the Authority proceeds with its policy proposals, the list of eligible investments should be specified as a "minimum", allowing Transpower to include additional investments.	Pacific Aluminium, Transpower
218	Including a selection of historical assets in the AoB charge would create new durability problems as customers would see it as unfair. The Authority is being pulled in two directions in relation to eligible investments: planning efficiency would lead to the inclusion of no historical assets, and durability would lead to the inclusion of all historical assets. The Authority needs to make choices between the two, instead of delivering the worst of all worlds by choosing both.	Trustpower

Eligible investments for the AoB charge

Submission	Submitter(s)
219 Including the HVDC link in the AoB would lead to more efficient operation of the electricity industry (in relation to the Authority's statutory objective) by leading to more efficient generation investment and providing better locational signals.	NERA for Meridian
220 In order to be consistent (and noting that Orion does not support the inclusion of historical assets in the AoB charge), if there is a reliable and robust method to calculate benefits, it would be logical for the method to apply to all assets.	Orion
221 Limiting AoB to a subset of historical assets would make it difficult for Transpower to implement the charge, given the type of annual maintenance and refurbishment it does.	Norske Skog
222 More assets should be included in the AoB charge to decrease the size of the residual, because the residual is too large.	E-Type Engineering, Grey Power Southland, Market South, McIntyre Dick and Partners, Otago Chamber of Commerce, Otago Southland Employers' Association, Preston Russell Law, Sarah Dowie, Southland Chamber of Commerce, Southland Manufacturers Trust, Stabicraft Marine, Todd Barclay
223 More assets should be included in the AoB charge to decrease the size of the residual, because the residual is too large. For example, assets commissioned or built prior to May 2004 could be included.	Contact Energy, Pacific Aluminium, South Port New Zealand
224 More assets should be included in the AoB charge to decrease the size of the residual, because the residual is too large. For example, the Authority could lower the \$50M threshold.	Gore District Council, Invercargill District Council , South Port New Zealand, Southland District Council, Venture Southland
225 More assets should be included in the AoB charge to decrease the size of the residual, because the residual is too large. For example, the Authority could lower the \$50M threshold. This would also be consistent with Transpower's Capex IM.	PowerNet
226 More assets should be included in the AoB charge to decrease the size of the residual, because the residual is too large. For example, the Authority could use the capex level for the standard method in 2019, adjust it in real terms to the year of investment, and use it to identify all eligible investments from May 2004.	Norske Skog
227 Pole 2 should be included in the AoB charge because it has clear benefits, the benefits of Pole 3 depend on Pole 2, and it appears to be difficult to separate Pole 2 and Pole 3 assets.	Contact Energy
228 Pole 2 should be included in the eligible investments, because it is appropriate to treat Poles 2 and 3 consistently.	Meridian
229 Residual assets should be moved to the AoB charge when they reach a specific point in their standard life. This would sharpen price signals and prevent grid over-build.	Oji Fibre Solutions
230 Support the \$50M threshold for eligible investments, because it removes the retrospectivity of the charge for investments built to support failed mining operations in Westpower's region.	Westpower
231 Support the \$50M threshold for eligible investments it is as a pragmatic trade-off.	Meridian
232 The 2004 cut-off for eligible investments is appropriate, because it represents a material change in investment decisions by Transpower.	PowerNet
233 The 2004 cut-off for eligible investments is appropriate because it is a pragmatic trade-off.	Meridian

Eligible investments for the AoB charge

Submission	Submitter(s)
234 The 2004 cut-off for eligible investments is arbitrary.	Entrust, Pacific Aluminium, Transpower, Unison
235 The arbitrary delineation of eligible investments would fail the durability test for the same reason that the current HVDC link charge does, because it is different charging for the same kind of asset.	ENA
236 The Authority should consider a more targeted AoB charge. For example, the Mid-West System Operator and Chile have higher thresholds for the AoB charge, which suggests that the Authority's thresholds are too low.	Castalia for Genesis
237 The HVDC link may not be worthwhile to include in the AoB charge given the small net benefit.	NZIER for MEUG
238 The HVDC link should be included in the AoB charge because it would promote competition by placing generators on a competitively neutral footing.	NERA for Meridian
239 The HVDC link should not be included in the AoB charge. This would make the quantified assessment of the impact of the current proposals far more attractive to consumer interests.	Powerco
240 The second issues paper understates the efficiency benefits of including historical assets in the AoB charge.	Meridian
241 Transpower should be encouraged to apply the AoB charge to historical investments to the extent that it has the data and resources to do so.	Nova Energy

Single main charge

Submission	Submitter(s)
242 Support not adopting the deeper connection charge, if a deeper connection charge would be less cost-reflective and less consistent with the service-based and cost-reflective principles.	NERA for Meridian
243 Support not adopting the deeper connection charge.	Marlborough Lines, Northpower
244 Support not adopting the deeper connection charge as there are concerns as to how it would work in practice, and would not produce market-like outcomes.	Meridian

Calculation of benefits for the AoB charge

Submission	Submitter(s)
245 A 60/40 load/generation split in who pays the AoB charge is undesirable because it favours generation and slows down the process of correcting the current problem of load paying charges that are too high.	ETNZ
246 Agree that all beneficiaries should be included, not just primary beneficiaries.	Norske Skog
247 Agree that both generation and load should pay the AoB charge.	Norske Skog
248 Agree that Transpower should be required to consult on applying the standard AoB methodology.	Meridian
249 Calculating benefits under the AoB charge would be very sensitive to modelling inputs, which could lead to large variations in charges. For example, calculating the benefit for NIGU at the beginning of 2015 (rather than 2016) results in a 97% reduction in net benefits.	Scientia for Transpower

Calculation of benefits for the AoB charge

Submission	Submitter(s)
250 Cost causation and economic benefits are intellectually appealing but can be very difficult to accurately quantify. This can lead to distortions in usage, and it is difficult to find broadly acceptable and transparent measures of benefits. This can lead to disputes and delays. Accordingly, a useful proxy metric such as peak usage could be useful.	Bushnell for Trustpower
251 Forecasting private benefits for the purposes of the AoB charge would be excessively complicated. This would result in higher costs for Transpower, and would not necessarily be a better approach, given that more complexity does not necessarily mean greater accuracy. The approach could also lead to substantial disputes.	Axiom for Transpower
252 Further discussion with Transpower is needed to consider the degree to which beneficiaries can be distinguished based on GIT analysis.	Castalia for Genesis
253 If it is not practicable to implement the AoB charge on a benefit basis, charges should be put into the residual, not allocated on a capacity basis. That would be less distortionary. Mighty River Power previously supported the AoB change in the second issues paper based on the view that the charge would be aligned with the grid investment test (GIT).	Mighty River Power
254 In considering the application of a "standard" AoB charge, the Authority should consider the type of benefit (private or market) that is used to calculate the charge as well as the correct degree of granularity. Transpower has genuine and serious reservations about the workability of using planning models to assign costs at a very granular level. Methodology to do so would be very sensitive to assumptions and may or may not be robust. One way to mitigate this would be to adopt a regional or zonal approach. This would make the allocation of benefits more stable and recognise the limitations in accuracy of assumptions while minimising inequities.	Transpower
255 It is not clear how the "aggregate positive net benefit" will be calculated or the circumstances in which the calculation of expected net benefit would be "not practical".	Unison
256 It is not necessary to aim for a high level of precision in identifying beneficiaries. Doing so would diminish returns and increase transaction costs. Therefore, the Authority's practical design parameters are sensible.	NERA for Meridian
257 It will be difficult to administer the AoB charge because parties will argue that their benefits are less than other parties'.	Air Liquide
258 Support a net (rather than gross) benefits approach. Meridian's previous concerns regarding a net benefits approach have been addressed. A net benefit approach would reflect real-world decisions.	Meridian, NERA for Meridian
259 Support the Authority's approach of not compensating dis-benefits. This is consistent with outcomes in a workably competitive market.	Meridian
260 Support the use of physical capacity and average injection as a fall-back measure of benefits.	Meridian
261 The allocation of benefits as between load and generation should reflect the benefits identified in the investment proposal.	Mighty River Power
262 The AoB charge should be capped at private benefit. That is because, particularly at the beginning of an asset's life, the cost of an investment will exceed its total benefits.	Axiom for Transpower
263 The assessment of benefits should include benefits arising in ancillary service markets.	Meridian

Calculation of benefits for the AoB charge

Submission	Submitter(s)
264 The Authority needs to be clear about whether "benefit" for the purpose of the AoB charge should apply to situations in which congestion is relieved in the transport of electricity from generation to load or whether it is a wider test.	Waitaki Power Trust
265 The Authority's modelling for the AoB charge overstates the reliability of the grid for consumers by exaggerating VOLL. This indicates that generators would pay too little of the AoB charge.	Vector
266 The CBA has a 60/40 split between load and generation, due to difficulties in allocating the benefits of investments to specific generators. This indicates that it is difficult to identify benefits. The CBA states that a tool such as SPD could produce more accurate costs. However this is unlikely to be the case in practice as it would lead to greater administration costs, and would have a considerable margin for error.	Axiom for Transpower
267 The complexity of allocating the AoB charge, and its contentious nature, may lead to the AoB charge being simplified down to a regional postage stamp charge. This would exacerbate the existing cross-subsidy problem.	Network Waitaki
268 The fall-back method of allocating the AoB charge on fixed deemed capacity is undesirable because it would dilute the already small service-based and cost-reflective signals that remain in the AoB charge.	ENA
269 The fall-back method of allocating the AoB charge to distributors should be capacity, not volume. This would ensure that a larger part of the market receives an AoB price signal.	NZIER for MEUG
270 The guidelines require Transpower to aggregate the individual customer benefits in an area, but this does not appear to add any value. It is not clear from the proposed guidelines that Transpower can identify beneficiaries in an area using one methodology and then allocate benefits within the area using a different methodology.	PwC for 14 EDBs
271 The identification of benefits does not take into account the fact that consumers are interconnected to a constrained and outdated system.	Waitaki Power Trust
272 The identification of benefits should take into account the reason why investments are made. Otherwise, the AoB charge regime will not deliver appropriate outcomes.	Northpower
273 The method for identifying benefits for the AoB charge is too complex.	Axiom for Transpower, EA Networks, Network Waitaki, PwC for 14 EDBs
274 The method for identifying benefits for the purposes of the AoB charge may not be robust because it could result in challenges to Transpower, could result in lobbying, or could have negative effects on durability. Some submitters identified that this would be the result of the complexity/uncertainty of the charge.	Axiom for Transpower, Bushnell for Trustpower, EA Networks, HoustonKemp for Trustpower, Pioneer, Powerco, Transpower, Unison
275 The method for identifying benefits for the purposes of the AoB charge may not be robust because it would need to be highly reliant on assumptions. Some submitters identified that small changes in assumptions could lead to large variances in charges.	Bushnell for Trustpower, Network Waitaki, Powerco, Scientia for Transpower, Transpower
276 The proposal, as modelled by the Authority, is not durable because it does not reasonably identify actual benefits. For example, the modelling of the Wairakei Ring does not appear to reflect the extent to which South Island load customers would be expected to benefit from the investment, the modelling is very sensitive to capping period, and the use of half-hour trading periods ignores the option value of the HVDC link to North Island hydro generation.	Contact Energy

Calculation of benefits for the AoB charge

Submission	Submitter(s)
277 The proposed allocation of the AoB charge to load and generation based on load flows does not adequately reflect the risk and benefits that load and generators take (for example, generation can tolerate lower reliability, and generators face demand and investment risk).	KCE
278 The proposed method for identifying benefits gives rise to very different results for customers, which makes it difficult to comment on the Authority's proposal, as customers do not know what the impact will be and neither does the Authority. The Authority should address this by requiring Transpower to consult on its initial conclusions as to which method it proposes to recommend (in the Authority's process). The guidelines should also provide Transpower with criteria about how to choose between the different methods. As a minimum, Transpower should be required to assess potential methods against principles including efficient infra-marginal pricing (see submission regarding efficient infra-marginal pricing).	Pacific Aluminium
279 There are very significant design and implementation issues with the identification of benefits under the Authority's proposals. The modelled AoB approach does not take into account the dependency of investments. This could distort cleared generation, cleared load, power flows, binding constraints, and nodal prices, all of which affect the assessed benefits under the proposed benefit calculation approach. This negatively affects the robustness and credibility of the allocation method.	Scientia for Transpower
280 There is not enough certainty in the method of identifying benefits for the purposes of the AoB charge.	EA Networks, Mighty River Power, Network Waitaki, Powerco, Unison , Waitaki Power Trust
281 There may be ways to take advantage of economies between the process for identifying benefits for the purpose of the AoB charge and the Commerce Commission's grid investment approval process.	NERA for Meridian
282 The uncertainty and flexibility in the identification of benefits could result in different allocations of costs between regions and consumer groups.	Unison
283 Transpower may not be able to develop a robust benefit-measurement method that is fit for transmission pricing purposes.	Transpower
284 Transpower may wish to consider whether system operator regions could provide a basis for identification of benefit.	Castalia for Genesis
285 Transpower should not determine benefits for the purpose of the AoB charge.	Waitaki Power Trust
286 Under the proposed guidelines, an area-of-benefit is an area in which at least one designated transmission customer is expected to receive benefits. However, where there is only one such customer, it would seem that a connection charge should apply and not the AoB charge.	Business NZ

Choice of method for identifying benefits

Submission	Submitter(s)
287 Forecast SPD may be the best method for identifying benefits, as it is the most objective (provided that assumptions are chosen on a robust and well-justified basis).	Meridian
288 Hogan's approach is not a preferable method for identifying benefits as it does not allocate benefits to individual participants.	Contact Energy

Choice of method for identifying benefits

Submission	Submitter(s)
289 In relation to the choice of method for identifying benefits, the area of influence method for identifying beneficiaries is better than using physical capacity and average injection, but worse than the SPD method or Hogan method, because the area of influence method is based on physics, rather than economics.	Contact Energy
290 In relation to the choice of method for identifying benefits, the balanced score card method is too simplistic, and would be open to potential challenge.	Contact Energy
291 In relation to the choice of method for identifying benefits, the forecast SPD method is preferable if there is capacity to do the required analysis and it can be applied to all grid investments. However, Nova has not explored the options in detail.	Nova Energy
292 SPD methods of identifying benefits are highly dependent on input assumptions.	Castalia for Genesis
293 The balanced score card approach is not a preferable method for identifying benefits because it risks being highly subjective and creating ongoing lobbying and disputes.	Meridian
294 The forecast SPD approach may be the best method for identifying benefits because it can signal the need for transmission investments, is familiar to parties, and may have lower implementation costs. However, establishing the counterfactual scenario could be very complex, the benefit calculation depends on a small number of critical parameters, and there could be some variation/fluctuation in transmission charges. Given those issues, a simplified zonal or regional (rather than nodal) version of SPD could be adopted.	Contact Energy
295 The Hogan-like method should be investigated because it would align with other planning and regulatory processes like the GIT, and would avoid creating conflicts and regulatory overlap in the long-term.	Mighty River Power
296 The method for identifying benefits should be as objective as possible, the focus should be on benefits rather than use (as this a purer implementation of the beneficiaries-pay approach), and synergies with the major capex proposal process should be sought which will align the identification of benefits with a well understood and widely accepted process.	Meridian

Marginal cost adjustment

Submission	Submitter(s)
297 If the AoB charge identifies potential customers, there is no need for a marginal price signal for new investments.	Contact Energy
298 Support a marginal cost adjustment mechanism as it will improve the efficiency of the AoB charge. Further work will be required on the implementation of this.	Meridian
299 The guidelines should state the type of circumstances where a marginal change adjustment would be available, but the details should be left to Transpower.	Castalia for Genesis
300 The marginal cost adjustment mechanism could result in customers paying for investments from which they derive no benefits.	Axiom for Transpower, HoustonKemp for Trustpower
301 The marginal cost adjustment mechanism could result in two customers facing different charges despite having the same benefits from the same capacity. They would have incentives to delay identifying options for demand management, including delaying until other parties propose demand management.	HoustonKemp for Trustpower

Marginal cost adjustment

	Submission	Submitter(s)
302	The marginal cost adjustment mechanism should be removed because it could lead to free riding, a lack of incentives for parties to ask for a marginal cost adjustment, duplicates other mechanisms, and could be addressed more directly elsewhere.	Transpower
303	The marginal cost adjustment mechanism would be costly as it would require new consultation schemes. The costs are likely to be substantial and well in excess of that estimated in the CBA.	HoustonKemp for Trustpower
304	The marginal cost adjustment mechanism would not prevent "tragedies of the commons" if multiple load reductions are required to result in efficiency.	Axiom for Transpower
305	The marginal cost adjustment would be distracting for Transpower, as it would considerably complicate Transpower's investment process.	Axiom for Transpower
306	The marginal price adjustment mechanism has the potential to reduce usage provided various practical difficulties can be overcome. However, the marginal cost adjustment would be unworkable and/or difficult to implement.	CEC for Trustpower, Transpower
307	The mechanism for marginal cost adjustment is complex and opaque. It would be better to base charges on LRMC in the first place.	CEC for Trustpower

Simplified and standard AoB methods

	Submission	Submitter(s)
308	\$20M is a better cut-off for the application of the simplified method. This will align better with the Commerce Commission regime (in particular the threshold for major capex) and would reduce Transpower's administrative costs.	Castalia for Genesis, Genesis Energy, PwC for 14 EDBs
309	It is not clear why low value investments need to be treated differently to high value investments. The grid operates as a single system.	Orion
310	It may be that investments under \$5M should just be included in the residual, as it may not be worth applying the AoB charge.	Castalia for Genesis
311	The \$5M threshold for the application of the standard method is arbitrary. All assets should be charged for under the standard method unless this cannot reasonably be done, in which case the simplified method should apply.	Business NZ
312	The distinction between the simplified and standard methods is not clear. The requirements that the simplified method be simple, easy to understand, and phased in over the shortest timeframe possible should apply to both the simplified and standard methods.	Business NZ
313	The guidelines should be amended to make clear that Transpower may use the same approach for all investments.	Contact Energy
314	The requirement that the simplified method be simple to understand should apply to both the simplified and standard methods. This will support durability, because parties will need to be confident that the methodology reflects their actual benefit.	Contact Energy
315	There should be a short and cost effective consultation process as part of the simplified method.	Genesis Energy

Simplified and standard AoB methods

	Submission	Submitter(s)
316	The simplified method should be quick and workable and minimise transaction costs. The phasing-in of the simplified method should be over the shortest period practicable.	Meridian
317	The simplified method should still charge the primary beneficiaries of an investment.	Mighty River Power, Nova Energy
318	The standard method should be applied to as many assets as is reasonably pragmatic. The benchmark level could be reduced as methodology and systems are developed.	Nova Energy
319	The threshold for the simplified method should depend on whether a benefit-based allocator can be applied or whether a capacity-based allocator is used for the AoB charge.	NZIER for MEUG

Review of AoB charge

	Submission	Submitter(s)
320	Irrigation developments in farming, which have been mandated by regional councils, constitute a material change for the purposes of reviewing the AoB.	Waitaki Power Trust
321	Restricting changes to the charges for 10 years is archaic and anti-business, given the current fast changing world.	Counties Power Consumer Trust
322	Review of the charge should be permitted when a material change in circumstances has occurred (in which case the threshold needs to be clearly defined in the TPM with a process under which Transpower or the Authority's Board can carry out special reviews). There should also be a process for adjusting the charge over time, for example, a regular review at a set interval as part of the grid planning process.	Genesis Energy
323	Support a stable and predictable AoB charge that will not change unless there is a material change in circumstances.	Mighty River Power
324	Support the AoB charge being assessed in advance and fixed, which will avoid creating incentives for gaming.	Meridian
325	The AoB charge may not respond efficiently to the entry and exit of major load and generation.	Powerco
326	The AoB charge should have a regular periodic review, in addition to reviews based on material changes in circumstances. This would reduce contention, would ensure that the charge remains aligned to relative benefits on an ongoing basis, would reduce contention in the initial calculation of the charge, and would reduce the necessity for Transpower to review the charge based on a material change in circumstances.	Meridian
327	The circumstances in which the AoB charge would be revisited need to be clear, with detail left to Transpower to determine in the TPM.	Castalia for Genesis
328	The material change in circumstances should be sufficient as a standalone reason to review the physical capacity calculation. A "lag" period should not be required.	Top Energy
329	The material change in circumstances test for the review of the AoB charge could lead to ongoing disputes. Periodic reviews may be better. In rejecting periodic reviews, the Authority may have over-estimated the ability of customers to game the review process.	NERA for Meridian

Price signals from AoB charge

Submission	Submitter(s)
330 An efficient pricing methodology elicits desirable behavioural changes before investments are made, and stops undesirable behavioural change after investments are made. The AoB methodology would not do this.	Axiom for Transpower
331 The AoB charge does not address the problem of the RCPD signal being too strong.	EA Networks
332 The AoB charges are a small proportion of total charges, meaning that the price signals will be quite weak. While the AoB charge may be the dominant charge in the long term, this is a very long-term expectation given that Transpower has just completed the major upgrade.	Network Waitaki
333 The AoB charge will have weak demand-side signals, which will increase future investment cost uncertainty and future price risks. Oakley Greenwood indicates that the new pricing arrangements will signal to end consumers only 3% of Transpower's expenditure.	Pioneer
334 The AoB charge will not elicit desirable behavioural change before investments are made, for some or all of the following reasons: customers cannot predict how their actions would affect Transpower's investments; customers would be unlikely to accurately predict the charges they would face if they acted in certain ways; the AoB charge would not reflect the gap between LRMC of future investment costs and nodal prices; and customers may not respond to AoB price signals because any benefits they could derive could depend on the actions of others.	Axiom for Transpower, CEC for Trustpower, EA Networks, PwC for 14 EDBs, Trustpower
335 The AoB charge would decrease distortions in the use of the grid because it is forward looking and fixed.	NERA for Meridian
336 The AoB charge would not affect where load customers choose to locate, because those location decisions are almost never affected by transmission costs.	EA Networks
337 The AoB charge would not provide a shadow price, so an LRMC charge would be necessary.	Transpower
338 The AoB charge would not provide the intended locational signal to generators and could result in inefficient investment decisions, as well as adversely affecting the operation of the wholesale electricity market.	Transpower
339 The AoB charge would not stop undesirable behavioural change after investments are made for the following reasons: it would not address the distortions that arise from the current charges; imposing additional charges on load may reduce allocative efficiency; and there would be additional costs (eg, implementing the method for identifying benefits) that would reduce productive efficiency.	Axiom for Transpower

Valuation of AoB assets

Submission	Submitter(s)
340 All assets should be valued on replacement cost for the AoB charge, as this would be the most service-based approach.	Top Energy
341 All assets should be valued on replacement cost for the AoB charge. Applying DHC-based charges to existing assets is unnecessary and would result in an inefficient time profile of prices.	Axiom for Transpower
342 All assets should be valued on replacement cost for the AoB charge. There is no rationale for using different valuation methods for assets. Using replacement cost for all assets would be more service-based. While replacement cost could lead to over-recovery if applied to all assets, this could be addressed by pro-rating prices downward to fit within Transpower's overall revenue cap.	Castalia for Genesis

Valuation of AoB assets

Submission	Submitter(s)
343 All assets should be valued on replacement cost for the AoB charge. Using depreciated historical cost will cause price shocks when aging assets are replaced. It is not cost-effective to use two different valuation methodologies at the same time.	PwC for 14 EDBs
344 All assets should be valued on replacement cost for the AoB charge. Using depreciated historical cost would cause price shocks when aging assets are replaced.	PowerNet
345 If assets are valued at replacement cost, those values will be higher than the values Transpower can recover under Part 4 of the Commerce Act. The guidelines should specify that replacement cost values are used only to allocate the AoB charge that is paid by each customer.	PwC for 14 EDBs
346 It is inconsistent for the Authority to promote replacement costs for new assets (to reflect service-based pricing) and depreciated historical costs for existing assets (for administrative ease).	ENA
347 Replacement cost asset valuation is not efficient, is complicated, and is potentially contentious. If the Authority wants to improve "benefit cost matching" the Authority could turn the unrecovered present value of the asset into an annuity, so that the cost is recovered uniformly over time.	Meridian
348 Replacement cost should not be used to value new assets, because it would result in the need for Transpower to revalue assets every few years. New assets should be valued on the cost of investment.	Unison
349 The AoB charge should be based on depreciated historical cost, which is consistent with the Commerce Commission's approach. There are no clear benefits of using multiple valuation methods, and using them will require Transpower to develop and maintain detailed valuation methods for each of the four options.	Pacific Aluminium
350 There are no clear benefits from using multiple valuation methods, which could be complex, contentious, and possibly not efficient.	NERA for Meridian
351 There is no rationale for using different valuation methods for assets. Doing so further loads the cost burden on Upper North Island users.	Vector

Effect of AoB charge on grid investment process

Submission	Submitter(s)
352 From the TPM workshops, Oakley Greenwood appears to be of the view that increased scrutiny would not increase efficiency of grid investments, contrary to its statement in the CBA that it would be "positive" and "potentially material". This appears to be an area of disagreement between Oakley Greenwood and the Authority.	Trustpower
353 Parties will not be incentivised to reveal their actual benefits in the grid investment process. Rather, they will make their submissions based on their own benefits. This will lead to parties gaming the grid investment process (eg, by understating their benefits).	HoustonKemp for Trustpower
354 Parties will not be incentivised to reveal their actual benefits in the grid investment process. Rather, they will make their submissions based on their own benefits. This will lead to parties gaming the grid investment process (eg, by understating their benefits, lobbying against investments from which they would benefit).	CEC for Trustpower , EA Networks, Trustpower

Effect of AoB charge on grid investment process

Submission	Submitter(s)
355 The AoB charge is not likely to increase the technical efficiency of the charge through participation in the grid investment process. That is because parties may not have the technical ability to contribute usefully in the grid investment process.	CEC for Trustpower
356 The AoB charge will counterintuitively decrease engagement in grid investment processes because the charge will be more targeted. To take an extreme example, if costs match benefits exactly, no-one will have any incentive to participate.	CEC for Trustpower
357 The AoB charge will not improve planning efficiency. Many parties have indirect connections to the grid, and would only be represented through their EDB. Other parties lack the capacity to participate. Only those with enough funds would be able to participate. If there is a problem with the Commerce Commission's investment regime, the Authority should explain the problem with the process.	Trustpower
358 The AoB charge will not lead to more constructive engagement in the investment approval process. Every party would be able to challenge one or more assumptions that underpin charges. In addition, it may make the investment approval process longer and more contested, which would make the Commerce Commission's job harder and could undermine the investment planning cycle.	EA Networks
359 The AoB charge would improve information revelation and investment scrutiny, and would improve competition between grid investment and other solutions.	NERA for Meridian
360 The AoB charge would result in customers having stronger incentives to oppose all investments. In addition, customers would focus on modelling assumptions that affect them adversely. This could result in unconstructive opposition and compromise dynamic efficiency, resulting in efficient investments being blocked.	Axiom for Transpower
361 The AoB regime will not increase customers' engagement in the grid investment process because the charge will rely on decisions made by other parties. Parties will not be able to predict the actions and responses of other parties.	HoustonKemp for Trustpower
362 The Authority appears to be relying on price shocks to drive participation in the grid investment process. Price shocks will reduce over time under the AoB charge as the AoB charge moves towards a long-run equilibrium. This may mean that the incentives for participation, if any, will decrease over time.	CEC for Trustpower
363 The Authority has not established that the TPM could support dynamic efficiency by encouraging engagement with the Commerce Commission.	Powerco
364 The Authority's proposed TPM will result in greater scrutiny and more attention to whether efficiencies can be achieved in terms of timing and scale of investments.	Meridian
365 The more a party is affected by a decision, the greater incentives it will have to engage in the decision-making process. The AoB charge will result in greater incentives to participate in grid investment decisions. NERA has found that the AoB charge will provide strong incentives to scrutinise grid investments in the range of \$19M to \$66M. See further NERA for Meridian submission.	Meridian
366 While Transpower invests on the basis of market benefits, the Authority would assess charges based on private benefits.	Mighty River Power, Transpower

Investment by generators

Submission	Submitter(s)
367 The Authority claims that the TPM will provide signals for generators to make more efficient investment decisions. This overstates the effect of transmission charges on generators, does not take into account inefficiencies, and does not take into account how generators see price signals.	EA Networks
368 The Authority has assumed that the AoB charge would result in efficient build order by generators. However, generators would see distorted price signals, so the AoB signal could distort build order (eg, the locational signal to invest in areas with pre-2004 investments).	Axiom for Transpower, Transpower, Trustpower

Other

Submission	Submitter(s)
369 Cautiously support the AoB charge as it is service-based and cost-reflective.	Norske Skog
370 Conservatively support the AoB charge.	TNT2
371 Do not support the AoB charge. It has a level of complexity that is unnecessary, it does not meet the distribution pricing principles (ie. prices should be certain, be transparent, promote price certainty, and have regard to the impact on stakeholders), and its calculation of benefits is unpredictable. This may mean that customers do not react appropriately to the price signals being sent.	Alpine Energy
372 Do not support the AoB charge because it is a discretionary allocation of sunk costs, rather than a service-based and cost-reflective structured price.	ENA
373 Prefer the status quo over introducing an AoB charge.	PwC for 14 EDBs
374 Support an AoB charge. An industry working group should be used to design the regime.	Northpower
375 Support the AoB charge, as long as it is workable and does not cause excessive price shocks.	Nova Energy
376 Support the AoB charge, subject to reservations regarding fixed deemed capacity.	Winstone Pulp
377 Support the AoB charge because it is cost-reflective.	PowerNet
378 Support the AoB charge because it is service-based and cost-reflective.	EnerNOC, Nicholas Brown, Oji Fibre Solutions
379 Support the AoB charge being included in the TPM, because it is a practical way to implement a beneficiaries-pay approach, and addresses problems with the current TPM.	Meridian
380 The additional costs of Transpower administering the AoB charge would need to be added to Transpower's recoverable revenue and it is not clear whether this would be recoverable under Transpower's individual price-path.	Unison
381 The AoB charge may result in Transpower incurring significant costs to implement the charge. This might not be efficient.	Unison
382 The AoB charge should be based on costs rather than benefits, as this is something with which distributors are more familiar.	Buller Electricity
383 The AoB charge violates the DME principle that charges should not exceed private benefit.	Powerco
384 The AoB charge will be difficult to implement.	Waitaki Power Trust

Other

Submission	Submitter(s)
385 The AoB charge will drive efficient outcomes because it is service-based and cost-reflective.	E-Type Engineering, Gore District Council, Grey Power Southland, Invercargill District Council , Market South, McIntyre Dick and Partners, Otago Chamber of Commerce, Otago Southland Employers' Association, Preston Russell Law, Sarah Dowie, South Port New Zealand, Southland Chamber of Commerce, Southland District Council, Southland Manufacturers Trust, Stabicraft Marine, Venture Southland
386 The AoB framework must be structured to enable competitive neutrality between transmission and demand response-based non-transmission alternatives. This would require: a consistent and transparent process, ideally with a quantified approach to evaluating benefits; AoB charges being signalled to the market to allow for the development of transmission alternative products; and standardised demand-response products. Transpower's role must be to administer a neutral market. Currently, its actions as a supplier of demand response discourage commercial suppliers of demand response from investment in the sector.	EnerNOC
387 The Authority has provided insufficient information regarding the AoB charge. This makes the long-term effects of the AoB charge unclear. The Authority should provide additional material on the AoB charge including specific case studies and scenario modelling.	Buller Electricity
388 The Authority's approach for eligible investments and valuation is selective, and loads the cost burden on other North Island consumers.	Vector
389 The Authority should align the AoB charge with the current grid investment test to promote consistency and durability.	Genesis Energy
390 The Authority should consider case studies from other jurisdictions. For example, Argentina's AoB charge distinguishes between minor and large expansions, and beneficiaries have a more direct say in which transmission projects proceed. More details are included in the submission.	Castalia for Genesis
391 The Authority should encourage Transpower to consider the use of classes of beneficiaries, particularly for the simplified AoB charge.	Genesis Energy
392 The Authority states that the AoB charge will incentivise customers to request information about charges from Transpower. The Authority should consider the timing aspects of this. There will need to be significant coordination so that parties can make informed decisions.	Contact Energy
393 The Authority states that the AoB charge would result in efficient deferral of investment. This does not appear to take into account the fact that some investments will be needed for reliability.	Fonterra
394 The combination of the AoB and residual charges may not signal the long-run marginal cost of investments, or encourage dynamic efficiency.	Powerco
395 The fall-back method for allocating the AoB charge to generation could be on the basis of forecast average injection, which would be fixed and less distortionary.	NERA for Meridian
396 The proposal will lead to Transpower needing to carry out additional consultation for small (\$5M to \$10M) projects, which may impact reliability if the consultation results in delays in starting projects.	KCE

Other

	Submission	Submitter(s)
397	The proposed AoB charge is better than previous proposals, but it is not in the long-term interest of consumers and should not progressed.	Powerco
398	The specific design of the AoB charge should take advantage of economies with the investment test run by the Commerce Commission, in order to maximise practicality and durability.	NERA for Meridian
399	The TPM should provide incentives to invest in non-transmission alternatives to replacement and refurbishment investment. This will reduce network over-build. For example, the guidelines could be amended to require Transpower to provide a forward price signal for asset replacement and refurbishment scenarios, as well as forecast and share information about upcoming replacement and refurbishment investments.	Oji Fibre Solutions
400	Transpower has too much discretion regarding the implementation of the AoB charge. The Authority should provide clearer guidelines regarding implementation. Support a consultative approach to implementation.	TNT2
401	Transpower should be given more specific direction regarding the parties it should consult with in determining AoB charges. Transpower should be required to consult with major consumers.	Auckland Airport
402	Transpower should engage with customers early in order to meaningfully influence Transpower's decisions and the Commerce Commission's decisions. This may make an LRMC charge redundant.	Contact Energy
403	Transpower should have more flexibility in the design of the AoB charge.	Castalia for Genesis

Residual

Size of residual

Submission	Submitter(s)
404 The residual is too large, would lead to distortion, and would be unlikely to result in efficient prices. The residual should be decreased by including historical assets in the list of eligible investments, adopting the same valuation method as the Commerce Commission, and allocating overhead costs through the AoB.	Pacific Aluminium
405 The residual is too large. The Authority's concern that ACOT results in too large a "postage stamp" charge is inconsistent with its view that the significant "residual" postage stamp charge is desirable.	NZ Energy
406 The residual is too large and results in charges that are not market-like.	NZ Steel
407 The residual is too large and results in charges that are not service-based or cost-reflective.	Network Waitaki, PowerNet, Waitaki Power Trust
408 The residual is too large given that it will be an unavoidable cost. The residual should only account for a very small percentage of overall cost.	Contact Energy
409 The residual is too large given that it will be an unavoidable tax/cost. The residual should be smaller, either by increasing the AoB charge, or introducing an LRMC charge. The residual charge should be no more than 25% of the total cost allocation pool.	Norske Skog

Physical capacity basis

Submission	Submitter(s)
410 A fixed charge does not send signals to consumers about the long-term costs of using the network. In particular, it may lead to a centralised development of new technologies, which would raise barriers for entry and would inhibit competition in new technology markets.	Contact Energy
411 Agree with allocating the residual on historical fixed capacity because it minimises distortions.	Meridian
412 As described previously by CEC, fixed charges create distortions. Even if the distortions are not in transmission usage, they will manifest themselves in something else.	Trustpower
413 Assessing physical capacity on gross AMD will not be service-based or cost-reflective if there has been a substantial change in network usage over the five-year period. For example, basing capacity on average gross AMD may overstate the load of distributors with large decreases in load. A single year's AMD, or two years' AMD, might be more appropriate.	PwC for 14 EDBs
414 Basing physical capacity on transformer or line capacity would be undesirable, because charges would be based on a level of capacity that is not likely to be ever fully utilised.	NZ Energy
415 Basing physical capacity on transformer or line capacity would be undesirable, because charges would be based on a level of capacity that is unlikely to be ever fully utilised.	Fonterra, NZ Energy, PwC for 14 EDBs, PwC for 14 EDBs, Waipa Networks, Westpower
416 Charging the residual based on fixed deemed capacity will lead to load control at the ICP level, even if that load control would be better suited to the network level.	KCE

Physical capacity basis

Submission	Submitter(s)
417 Deemed capacity should be determined at the ICP for all load classes, to avoid direct-connects unfairly paying higher charges. For ICPs without half-hour metering, smart meter data or an estimate could be used. The Authority's previous ICP-based proposal was modelled at 20kW, which was too high for fairness, but if (for example) 7kW was used, this would be reasonable.	Winstone Pulp
418 Do not support gross AMD because it would create large wealth transfers, it would significantly disadvantage Norske Skog, and it does not reflect the fact that peak use drives grid investment.	Norske Skog
419 Do not support historical-based fixed deemed capacity, as it would lead to disputes. Instead, the residual charge should recognise permanent changes in demand patterns, potentially through the PDP.	Mighty River Power
420 Equity is important in determining the recovery of fixed costs. For example, allocation of the residual in equal parts to the 29 New Zealand distribution companies would be inappropriate primarily because it would run counter to equity.	Bushnell for Trustpower
421 Examples of cases in which using transformer or line capacity would potentially be distortionary are Powerco's Moturoa zone substation (high physical capacity due to former New Plymouth power station) and Transpower's Carrington Street GXP (high physical capacity due to previous generation capacity at New Plymouth and historical grid planning decisions).	Waipa Networks
422 Fixed charges are not efficient. This will lead to instability and incentives to game the system. For example, NZ Steel may change its GXPs to allow for consolidation with Counties Power.	NZ Steel
423 Fixed charges for the residual are unfair and arbitrary.	CEC for Trustpower
424 Fixed deemed capacity is arbitrary, retrospective, and imposes charges on captive customers, who will not be able to avoid charges.	NZ Steel
425 Fixed deemed capacity is undesirable because it will not provide a signal to minimise grid capacity. On the other hand, an RCPD signal is equally undesirable. A customer's residual charge should be adjusted if the customer adjusts its load.	Oji Fibre Solutions
426 Gross AMD is an undesirable measure, as it is retrospective, arbitrary and not cost-reflective. It does not recognise the benefits of diversification, and it does not reflect the fact that winter peaks lead to load constraints and therefore investment.	NZ Steel
427 If a capacity-based charge is used for the residual, load should be assessed net of distributed generation that has already been commissioned.	Top Energy
428 If the Authority chooses gross AMD, a 5-year average of gross AMD would disadvantage the Westpower region due to loss of load in the 5 years. This would be inequitable because it would not resemble future AMD. A better method would be to use the average gross AMD in each month over the 12 months ending 30 April 2016, and adjust for lost demand for that period.	Westpower
429 If the Authority proceeds with a capacity-based charge, Transpower needs to be given criteria to test different allocation approaches, to reduce the potential for lobbying.	Unison
430 If the Authority uses gross AMD for the residual, provisions need to be included to ensure industrial direct connects are charged based on net purchase volume, to reduce distortion on the pay-back from those historical investments.	Norske Skog

Physical capacity basis

Submission	Submitter(s)
431 If the residual charge is based on capacity, physical capacity for load customers should be calculated net of any generation installed (or consented to) prior to the date of the guidelines. This would avoid distortion and recognise that customers have made investments based on the regulatory regime, which has reduced Transpower's investment requirements.	PwC for 14 EDBs
432 It is good that the proposed residual charge treats distributors and direct-connect customers on the same basis. This is an improvement from the previous approach.	Meridian, Orion, PwC for 14 EDBs, Unison
433 Line capacity may not reflect actual GXP demand because of power flows. Line capacity may not relate to actual demands. Transformer capacity may not reflect demand because transformer size may have been chosen due to future expected demand growth or security requirements.	PwC for 14 EDBs
434 Metered AMD (net or gross) is preferable to transformer capacity or line capacity.	Buller Electricity
435 More detail is required regarding the basis for physical capacity, which affects charges significantly.	Fonterra
436 Physical capacity should be based on a measure of maximum demand on the asset.	Waipa Networks, Westpower
437 The Authority has not provided enough data for parties to understand the impact of the different measures of physical capacity. Instead, Transpower should be required to investigate the appropriate measure of capacity to use, which should not be restricted to three options. The allocation factor must provide consistency between different types of customers, and this may require different allocation factors to be used for different customers.	Pacific Aluminium
438 The Authority needs to provide more information in the guidelines about the circumstances in which each of the three methods for calculating capacity for the purposes of the residual charge will apply.	Waitaki Power Trust
439 The Authority should consider allocating the residual charge on the basis of the electricity conveyed in the distribution network rather than the GXP/AMD.	Buller Electricity
440 The Authority should provide guidance to Transpower regarding how N-1 assets are to be treated for the purposes of the physical capacity measurement.	Fonterra
441 The Authority's proposal to charge for the residual on a five-year gross AMD (not net) is undesirable, because a network that has distributed generation will pay the same as an equivalent network with no distributed generation, even where the net AMD at a GXP is zero. This results in a decrease in competition because it reduces efficient distributed generation plant. This is inconsistent with the Authority's statutory objective.	NZ Energy
442 The basis of the residual charge should not be retrospective, as this can lead to undesirable and arbitrary outcomes. Instead, a form of peak-based charge should be used.	Orion
443 The capacity-based allocator could result in inefficiencies, for example a tendency to "build small" or act in inefficient ways to avoid the charge. The Authority should bear in mind that parties act differently to avoid the HAMI charge, despite its 5-year calculation basis.	Axiom for Transpower
444 The fixed deemed capacity is undesirable. It puts too much emphasis on the need for an unavoidable tax approach, which is likely to lead to more frequent operational design changes.	Winstone Pulp

Physical capacity basis

Submission	Submitter(s)
445 The guidelines should not specify the allocation factors required for the residual. The guidelines should give Transpower the flexibility to choose a residual allocator, either by giving Transpower full choice, or by giving Transpower a non-exhaustive list. This would allow the consideration of alternatives (eg, historical average of median demand, weighted average of historical RCPD).	Axiom for Transpower
446 The method for calculating the residual results in unfair pricing for captive customers who will not be able to avoid charges.	NZ Steel
447 The paper does not address how physical capacity will be calculated for large users within distribution networks.	Winstone Pulp
448 The proposed TPM would result in double counting of metering values (eg, at Buller's ORO GXPs), so the TPM should provide for aggregation of nodes if they are clearly supplying the same consumer base (albeit at different times). Westpower suggested that this could be done by using the sum of individual half-hourly demands at each node to calculate the overall after-diversity demand for the site.	Buller Electricity, Westpower
449 There is a risk that the physical capacity measure for the residual would include capacity that is provided by assets covered by the AoB, leading to double-dipping.	Orion
450 There is no reason to prescribe the residual charge in so much detail. Transpower should be free to choose an allocation approach for the residual that will best meet the statutory objective. A good alternative would be a weighted average of historical RCPD.	EA Networks
451 There needs to be more certainty regarding the basis of allocation of the residual charge. It is particularly important that direct-connect customers and distributors are on an even footing.	Marlborough Lines
452 The residual charge should be allocated in a way that does not incentivise direct connects and large consumers within distribution networks to aggregate to avoid the full cost of their demand. Instead, the guidelines could use the overall ratio of RCPD to AMD multiplied by AMD.	Oji Fibre Solutions
453 The residual charge should be based on a five-year average AMD at the GXP.	NZ Energy
454 There would be some ability to game the charge if load is based on historical physical capacity, but it is difficult to think of a mechanism that would not involve some gaming, and changes in capacity could be costly for the load.	NERA for Meridian
455 Transformer capacity and line capacity are better methods than AMD, but would not be cost-reflective. Transformer capacity and line capacity are not drivers for new core grid investments. For example, transformers at the Oamaru GXP are 60MVA units, but constraints mean that available demand is 40MW. Another example is Twizel GXP, which has significant excess transformer capacity due to historical use. Line capacity would be difficult to allocate to customers, given that customers do not use assets at the same time of the year, and constraints would need to be taken into account.	Network Waitaki
456 Transformer capacity should not be used to set residual charges, as it will incentivise the replacement of transformers where there is already installed over-capacity.	Oji Fibre Solutions
457 Transpower has too much discretion regarding the basis of the residual charge.	Unison , Westpower

Physical capacity basis

Submission	Submitter(s)
458 Unison prefers an RCPD-based charge to a capacity-based charge. However, if a capacity-based charge is used, gross AMD is preferable, which would avoid large step increases in the residual charge, spreading the charge and making it less subjective.	Unison
459 Using cost allocators based on historical measures will negatively affect durability because it will lead to pressures to change the TPM.	NZIER for MEUG

No peak-based charge

Submission	Submitter(s)
460 Any proposal for the residual should encourage consumers to efficiently decrease their load.	Fonterra
461 A peak-based charge is efficient/desirable because it reduces peak demand (eg, by spreading load, reducing demand), deferring transmission investment. Removing a peak-based charge could increase peaks (for example by disincentivising investment in load management technology, insufficient price signals), inefficiently bringing forward grid investment.	Air Liquide, Axiom for Transpower, Buller Electricity, Bushnell for Trustpower, Business NZ, Counties Power Consumer Trust , EA Networks, Eastland Generation, Electric Power Optimisation Centre, ENA, Fonterra, GBC Winstone, KCE, KiwiRail, Marlborough Lines, Molly Melhuish, Network Tasman, Network Waitaki, Norske Skog, Northpower, NZ Steel, NZIER for MEUG, Oji Fibre Solutions, Orion, Pioneer, Powerco, Powernet, PwC for 14 EDBs, Refining NZ, Top Energy, Transpower, Unison , Vector, Waipa Networks, Winstone Pulp
462 A peak-based charge is environmentally friendly.	Counties Power Consumer Trust
463 A peak-based charge would remove some of the anomalies that can arise from other methods. For example, under an anytime maximum demand approach, the AMD will be greater when the number of points of measurement is greater, even if downstream consumer demand is the same.	Orion
464 Do not support the removal of a peak-based charge, as the retention of incentives to reduce demand will be important in the long-term.	KiwiRail
465 Eliminating a peak-based charge would provide better locational signals and more efficient generation and load investment.	NERA for Meridian
466 Fixed deemed capacity is undesirable because it does not adequately distinguish between avoidance of charges through shifting peak demand and sending price signals to encourage the beneficial use of grid capacity.	Winstone Pulp
467 Fixed deemed capacity is undesirable because it removes the opportunity for parties to modify their behaviour to respond to price signals in a way that would ensure the efficient operation of the grid.	Pan Pac
468 Fixed deemed capacity is undesirable because it will not provide a short term congestion price signal or a medium term incentive to minimise grid capacity.	Winstone Pulp
469 If the RCPD charge is removed, an LRMC charge should be adopted alongside the AoB.	Transpower

No peak-based charge

Submission	Submitter(s)
470 If there are problems with the current peak-based charge, it should be adjusted, not removed.	EA Networks, Eastland Generation, ENA, Network Waitaki, Pioneer, Powerco, PwC for 14 EDBs
471 In terms of gross system demand, net GXP plus distributor generation plus demand response would be 20% above current net load. Demand is currently being managed by around 650MW with 625MW in response to RCPD price signals.	Transpower
472 It is important to avoid over-correction by removing peak demand signals. Transpower has begun work on the implications of removing an RCPD charge, including a Scientia review of gross system demand. Removing a peak-based charge would result in Transpower needing to carry out administrative demand response in 2016. Transpower has also done some work to estimate and quantify the potential impact of removing a peak-based charge, and would be happy to brief the Authority on Transpower's approach and findings.	Transpower
473 It is undesirable to regard the failure to use the full capacity of the grid as "wasteful". It encourages Transpower to maintain utilisation rather than increase energy and resource efficiency. The TPM should allow the least-cost avoiders to avoid the transmission system first.	NZ Steel
474 Nodal prices are not likely to provide adequate price signals, because differences in nodal prices are a small percentage of the total wholesale electricity price, and there will be overlap with generation capacity signals. TPM prices are secondary factors in electricity consumption decisions.	NZIER for MEUG
475 Nodal price signals are inadequate because retailers do not see those signals. The Authority has not shown that recent transmission investments were actually signalled by spot prices.	Fonterra
476 Peak-based charges result in a flatter demand profile, efficiently driving new investment at the lowest cost. Removing a peak-based signal could inefficiently bring forward transmission investment, at a cost of up to \$500M per annum.	Pioneer
477 Peak-based signals are a useful proxy for the trigger for capacity investment. Transpower relies on peak demand forecasts in their planning. Their current peak-based charge is straightforward and transparent to measure.	Bushnell for Trustpower
478 Removing an RCPD charge would promote competition.	NERA for Meridian
479 Removing a peak-based charge could have negative flow on impacts for wholesale prices. Instead, a capacity component could be used in conjunction with an RCPD component, which will result in less distortion while retaining some incentives to reduce demand at peak times.	Network Tasman
480 Removing a peak-based charge may/would result in inadequate nodal price signals.	Axiom for Transpower, Contact Energy, Eastland Generation, ENA, Fonterra, NZ Steel, NZIER for MEUG, Transpower
481 Removing a peak-based charge would disincentivise investment in load management. This might not be easy to reverse in the future.	NZ Steel
482 Removing the peak-based charge may be viewed as unfair pricing for captive customers who will not be able to avoid charges. This would be viewed as monopoly-like pricing.	Network Waitaki
483 Removing the peak-based charge without a transition would discourage the 1000MW of load control and would introduce a security of supply risk.	Vector

No peak-based charge

Submission	Submitter(s)
484 Retaining the current RCPD charge would be better than an LRMC charge, and would be more service-based, because parties could choose when to operate, and therefore pay a charge that is reflective of the peak/off-peak service they are receiving.	Unison
485 Support MEUG's submission that the AMD allocator would be less efficient than a peak-based charge because of the use of historical allocators, and the allocation of charges to consumers that do not contribute to peak demand.	Fonterra
486 Support the residual being allocated on a AMD/physical capacity basis. A peak-based charge risks incentivising inefficient decisions in investment, and potentially inefficiently curtailing load during winter peak periods.	Mighty River Power
487 The Authority is removing the peak-based charge on the basis that it is inefficient, irrational, or otherwise contrary to the Authority's objectives, for consumers to change demand patterns to avoid charges. However, such a change in demand pattern is the rational response of a fully competitive firm.	NZ Steel
488 The Authority needs to consider whether its changes will undervalue the role of smaller and less centralised distribution resource technologies, given the lack of incentives for distributors to negotiate with smaller and less centralised distributed resource technologies.	Bushnell for Trustpower
489 The benefits of a RCPD pricing system have been acknowledged by Oakley Greenwood in the CBA and are assumed in deriving Transpower's current revenue price path. Therefore, they need to be recognised by grandfathering provisions, or replaced by an LRMC-based component.	Pioneer
490 The current peak-based charges are inefficient because they over-signal the benefits from distributed generation.	Meridian
491 The current peak-based is charge cost-reflective because it reflects the fact that grid investment is driven by winter peaks. It also creates good incentives to use investments in the summer, which improves load factors. It would also maintain incentives to control load and install distributed generation, which is useful and defers investment.	Network Waitaki
492 The fact that Transpower has guaranteed recovery leads to Transpower favouring grid solutions over alternatives. The TPM needs to provide for alternative solutions on a non-discriminatory, competitive basis. If there is a problem with the RCPD price signal, it could be modified to dampen the signal to be nearer to the average LRMC. Excess capacity caused by Transpower's mistakes and its guaranteed recovery should not result in distributed generation and demand response being penalised. The benefits of demand response and distributor generation are lumpy as the grid grows. Just because distributed generation and demand response is of less benefit now does not mean it will not be of benefit in the long-term.	Morrison Low for Pioneer
493 The load factor allocated to Network Waitaki in the TPM is lower than that in the PWC information disclosure compendium. This appears to be a result of the Authority using the individual maximum demand capacities of each of Network Waitaki's GXPs whereas the Commerce Commission requires that load factor be based on maximum coincident peak demand. If a load factor charge is introduced, it should be based on maximum coincident peak demand.	Network Waitaki
494 The peak-based charge benefits domestic consumers, because it incentivises the provision of domestic controllable load.	Network Waitaki

No peak-based charge

Submission	Submitter(s)
495 The peak-based charge helps lower grid security limits.	Orion
496 The question of whether nodal pricing provides an adequate price signal may depend on how the AoB charge is implemented.	Eastland Generation
497 The RCPD-based allocator should be retained because: it would be more efficient than AMD; it is consistent with Ramsey principles that should not be discarded too quickly; Transpower's recent tuning of the RCPD charge appears to be correct on a Ramsey-analysis; and retaining the RCPD measure would reduce the amount of unnecessary price shocks.	CEC for Trustpower
498 The RCPD-based charge should be retained.	Northpower
499 The RCPD charge has successfully reduced peak demand and deferred investment, so appears to be a victim of its own success.	Marlborough Lines
500 There is not a lot of surplus capacity on the Upper North Island grid.	NZ Steel
501 The removal of a peak-based charge, in combination with the DGPP review, results in significant wealth transfers that would have significant costs that the Authority needs to take into account. These include a chilling effect on investment through increasingly conservative investors, delays for investment, and the shifting of capital away from New Zealand to other markets with lower risks.	Infratil
502 The removal of peak-based charges will remove incentives to efficiently manage load, resulting in additional system losses. It will also diminish the ability of network companies to manage load.	KCE
503 The removal of peak-based charges will remove incentives to efficiently manage load at a regional level, which allows for a better lifespan of the network and higher quality. This undermines one of the purposes of changing the TPM, which is to drive the efficient operation of the electricity industry.	Fletcher Building
504 The removal of the peak-based charge in addition to the introduction of an LRMC charge may introduce volatility that makes it difficult to provide consistent price signals to customers.	Marlborough Lines
505 There should not be a peak-based charge. Sufficient signals will already be sent through the nodal spot price and potentially an LRMC charge.	Meridian
506 The residual should not be entirely unavoidable. The industry understands and knows how to work with an avoidable charge such as RCPD.	PwC for 14 EDBs
507 The retention of incentives to reduce demand will/may be important in the long-term (eg, when constraints start to emerge).	EA Networks, Electric Power Optimisation Centre, KiwiRail, Norske Skog, NZ Steel, Orion, Pioneer, Unison
508 The SPD price signal is not durable as it is too sensitive. When new generation is built, the nodal price falls.	Contact Energy
509 Transpower should be given the flexibility to retain an RCPD-based charge.	ENA

Inclusion of demand response/distributed generation

Submission	Submitter(s)
510 Any method relying on participants to self-report the quality of demand response at their sites incentivises under-reporting, and any ex-post statistical approach will be open to dispute and potential litigation.	EnerNOC
511 Hot water load restoration at times creates new local peaks. (5 years) plus the provision. A long timeframe in the provision allowing review of the measurement time period would capture these peaks without the need for retrospective estimation of demand response.	EnerNOC
512 Including demand response in gross AMD would be impractical and would incur prohibitive transaction costs, rendering the benefit of including a demand response component negligible.	EnerNOC
513 Including distributed generation for calculating a residual is undesirable, because it signals that distributed generation does not contribute to the capacity of the grid, when in fact it reduces required grid capacity. This goes against the competitive aspect of the Authority's mandate.	KCE
514 Interruptible load should not be included in the calculation of gross AMD because it would result in the double-counting of demand from interruptible load.	EnerNOC
515 It is not appropriate to include demand-response, co-generation, and other on-site generation that may play a role other than avoiding transmission costs. For example: Fonterra's industry co-generation is to generate steam, and is not driven by connection redundancy (though this is a secondary benefit); NZ Steel uses demand-side management that does not lead to lost load; Norske Skog's co-generation was invested in to reduce the total cost of energy, not to avoid transmission charges; parties should not be penalised for load control that is needed to remain within Transpower's interconnection constraints (a contractual obligation) because this would be a condition that service providers in a competitive market would not be in a position to implement.	Network Waitaki, Norske Skog, NZ Steel
516 It is not appropriate to include demand-response, co-generation and other on-site generation that may play a role other than avoiding transmission costs. For example: Fonterra's industry co-generation is to generate steam, and is not driven by connection redundancy (though this is a secondary benefit); NZ Steel uses demand-side management that does not lead to lost load; Norske Skog's co-generation was invested in to reduce the total cost of energy, not to avoid transmission charges; parties should not be penalised for load control that is needed to remain within Transpower's interconnection constraints (a contractual obligation) because this would be a condition that service providers in a competitive market would not be in a position to implement.	Fonterra
517 Load movement should not be treated as demand response.	Norske Skog
518 The inclusion of distributed generation, demand side management, and demand response in the calculation of gross AMD has the potential to overstate a customer's load.	Fonterra
519 There are problems with adding distributed generation and demand-response to the calculation of the residual. For example, it would require some estimation, causing efficiencies. There are also boundary issues for "demand response". For example, demand response could include: demand response that is behind load (so is unknown); the estimated difference between controlled and uncontrolled load due to direct distribution load management actions; consumer price response; and consumer choices (eg, efficient appliances).	Orion

Who pays the residual

	Submission	Submitter(s)
520	Both load and generation should pay the residual charge. Charging residual to load only would create durability issues.	ENA
521	Both load and generation should pay the residual charge. Distortion is not a good reason to not charge generators, because such distortions will arise in distributors recovering costs from load anyway.	Orion
522	Both load and generation should pay the residual charge. Generators need price signals to locate near load. Generators are likely to favour locational pricing for the residual, which would be desirable because it would strengthen the location signals for generators.	Waipa Networks
523	Both load and generation should pay the residual charge. That is because: they both benefit from access to the market; charging load only could lead to generators free-riding and would also lead to generators inefficiently choosing to use transmission assets over distribution assets and would make industrial generation less competitive than standard grid connected generation; and spreading the cost to generators would reduce the risk that transmission prices will breach the "between standalone and incremental cost" test for generators, EDBs and major industrials.	Counties Power
524	Both load and generation should pay the residual charge. That is because it is efficient to apply a "least distortionary" approach (provided that the residual is smaller). The Authority has not established that generators should be excluded, because it has not established that they would be more sensitive to substantially fixed charges.	Pacific Aluminium
525	Both load and generation should pay the residual charge. The argument that any charge paid by generation will be passed through is not valid, because a pass-through will provide load with an efficient price to reduce energy use.	Fonterra
526	Both load and generation should pay the residual charge. The argument that generators will pass-through charges is not a good one, because load will also pass-through charges.	PwC for 14 EDBs
527	Both load and generation should pay the residual charge. The Authority is of the view that generators would increase their offers in the wholesale market, but generators would be limited in their ability to do so in a competitive market.	Electric Power Optimisation Centre, Norske Skog
528	Both load and generation should pay the residual charge. The residual should be spread evenly between generation and load.	Fonterra, Northpower
529	Even if firms were able to pass these costs on to the load, that is no reason to not charge the generators.	Electric Power Optimisation Centre
530	Load should pay the residual (not generation), because load can pass-through charges whereas generators would variablise charges through the wholesale market, distorting bidding behaviour.	Contact Energy, Meridian
531	Load should pay the residual (not generation), because load is more inelastic than generation.	Meridian, NERA for Meridian
532	Load should pay the residual (not generation), because load is the ultimate beneficiary of transmission.	Contact Energy, NERA for Meridian
533	Load should pay the residual charge (not generation). Charging the residual to load should increase reliability, because the security supply externality is particularly strong from the perspective of load.	NERA for Meridian
534	Load should pay the residual charge (not generation). Recovering charges from generation would increase transaction costs.	Meridian

Who pays the residual

Submission	Submitter(s)
535 Load should pay the residual charge (not generation). The value of lost load will significantly exceed the value of lost generation. Allocating a majority of grid costs to load is the international norm.	NERA for Meridian
536 There are arguments for charging generators, including that it would create a broad based locational price signal for generators. These considerations need to be weighed against the considerations the Authority has identified that support charging load only.	Transpower
537 TPM charges should be split more equitably between generation and load. This would create a wider base for the recovery of sunk assets, which will reduce distortion. Generators should pay charges because they benefit from the grid. The proposed TPM amounts to a "free ride" for generators.	Vector

Review of charge

Submission	Submitter(s)
538 Agree with a review mechanism of the charge. To reduce the risk of gaming, any review period should be very long (eg, ten years) or difficult to anticipate.	Meridian
539 A long "lag" period will not necessarily prevent customers from changing their actions to avoid the charge. For example, certain generators strategically withhold capacity to avoid the HVDC charge, despite the fact that it is based on a five-year period.	EA Networks
540 A periodic reset is likely to induce behaviour similar to a simple variable charge, as parties will anticipate the review and make changes to their usage. Discretionary resets may induce constant lobbying by winners and losers, and random resets generate uncertainty from participants.	CEC for Trustpower
541 A review mechanism could provide incentives for altering usage, for example, pushing distributed resources behind the meter to offset load.	Bushnell for Trustpower
542 Do not support a "lag" period in the review of the residual charge, as it does not reflect the fact that businesses are exposed to fast-moving changes.	Fonterra
543 Do not support a "lag" period in the review of the residual charge, because it would not lead to an equitable allocation of charges. The review process needs to provide for charges to be adjusted if there is a material change of circumstances, for example, the closure of the Cape Foulwind plan on Buller's network.	Buller Electricity
544 Do not support a "lag" period in the review of the residual charge, because it would not reflect actual demand or capacity, and would therefore not be service-based or cost-reflective.	PwC for 14 EDBs
545 Do not support a "lag" period in the review of the residual charge. Adjustments should be reflected in the following pricing year.	TECT
546 Do not support a "lag" period in the review of the residual charge. The material change in circumstances should be sufficient as a standalone reason to review the physical capacity calculation.	Top Energy
547 Fixed charges are challenging when there is direct or indirect customer entry and exit.	Bushnell for Trustpower, CEC for Trustpower
548 The lack of ability to adjust/review the historical allocator has durability implications, as charges become more and more unfair over time.	CEC for Trustpower, NZIER for MEUG

Overhead and unallocated costs

	Submission	Submitter(s)
549	Including overhead charges in the residual is not equitable and will create an imbalance. Overhead costs should be apportioned over the residual, AoB, and connection charges.	Oji Fibre Solutions
550	In relation to Transpower's operating costs and overheads, the Authority needs to take a principle-based and efficient approach given the size of the amount allocation. ENA does not have a preference between the residual approach and the surcharge method.	ENA
551	In relation to Transpower's operating costs and overheads, the first priority should be to identify beneficiaries of the unallocated operating costs. If that option is not available, Transpower should decide on a solution.	MEUG, NZIER for MEUG
552	More of Transpower's unallocated costs should be allocated to assets to which they relate. This would decrease the size of the residual, which is too large.	South Port New Zealand
553	Oppose a surcharge approach, because it will over-signal the cost of new generation investments (leading to inefficient decisions), may encourage disproportionate investment by some participants, will not add anything to existing Commerce Commission processes, and would raise jurisdictional issues for Transpower (which does not have the statutory power to establish a new tax or levy without government authority). It is also poor public policy as it is not cost-reflective or service-based.	Genesis Energy
554	Overhead charges should not be in the residual. The AoB charge should include an allocation of overhead costs.	Pacific Aluminium
555	The allocation of overhead and unallocated costs is unclear. The Authority appears to allocate overhead and maintenance costs in a way that generators would only pay their incremental overhead and maintenance costs, which does not appear to be service-based or cost-reflective. More clarity is needed in the guidelines.	PwC for 14 EDBs
556	The Authority, the Commerce Commission and Transpower should consider how to reduce the annual cost of transmission, in particular, Transpower's (sizable) overhead costs. There needs to be more transparency regarding those costs.	Contact Energy
557	The least distortionary way to recover allocated and overhead costs is through the residual. The surcharge-based approach would undermine the cost-reflectivity of the AoB charge.	Meridian, NERA for Meridian
558	The surcharge approach is undesirable because it would increase by leverage the impact of uncertainty in the AoB charge. The residual charge also provides a smoother transition for the introduction of the AoB charge.	Nova Energy
559	Unallocated costs should be allocated to assets to reflect the full economic cost of the services they provide.	NZAS

Other

	Submission	Submitter(s)
560	At the Wellington TPM workshop, an independent economic consultant expressed the view that "it didn't matter what actual allocator is used to set the capacity level for allocation of the residual charge". However, the allocation matters a lot for the ability of parties to remain profitable, and for regulatory durability.	Norske Skog
561	Customers connected to the grid using shared spur line assets should be charged the residual based on the net effect of the load and generation at the connection point. Generation used within a shared asset area should not attract charges.	Waipa Networks

Other

Submission	Submitter(s)
562 If a load customer is exporting a majority of the time, it should not be treated the same as a load customer. Treating them the same as a load customer would not be service-based or cost-reflective.	PwC for 14 EDBs
563 If the RCPD price signal is removed, Top Energy is unlikely to continue to maintain and operate ripple control in its network, which could add 12-15% to total peak demand and result in increased costs for supplying the network at peak times.	Top Energy
564 It is not clear whether the reduction in the residual over time would apply nationally or regionally. This is significant because the residual is likely to reduce at different rates in different regions.	NZIER for MEUG
565 Parties should be able to be reclassified from load to injection if their power flow changes on a permanent basis.	TECT, Top Energy
566 Prefer net (rather than gross) residual as it would more reasonably reflect service levels. A gross approach would create counter-intuitive results, for example, relatively significant residual charges for geothermal generation sites resulting from the few trading periods during which they are on maintenance shut, even if onsite back-up generation were operated.	Mighty River Power
567 Prefer net (rather than gross) residual because a gross method would disincentivise distributed generation, and would not recognise the benefit of distributed generation. For the purposes of the residual charge, capacity should be calculated net of existing distributed generation that is installed (or consented to) prior to the TPM change.	PowerNet
568 The Authority should provide analysis about how quickly the residual charge will reduce over time.	Fonterra
569 The capacity-based residual charge will not provide locational signals, and the Authority's statutory objective would be better promoted if the residual charge combined a measure of both capacity and proximity between load and generation.	Pacific Aluminium
570 The draft guidelines treat a customer making a permanent change to its demand differently from a new or disconnecting customer. They should be treated the same.	Pacific Aluminium
571 The net position of Counties Power load, NZ Steel load, less Alinta output, constitutes the impact of NZ Steel on the grid at any point in time.	NZ Steel
572 The residual charge appears to erroneously include 2% for nodes owned by generators.	NZIER for MEUG
573 The residual charge minimises incentives on transmission customers to invest in alternatives to avoid the charge. This undermines the purpose of section 54Q of the Commerce Act, which is to promote incentives to invest in energy efficient technologies and demand-side management. To avoid this, generators should pay 50% or 100% of the residual charge.	ETNZ
574 The residual could grow (not reduce) as a result of optimisation, the entry and exit of parties, and technical changes over time. This could reduce the durability of the Commerce Commission's regime (whereby Transpower can recover the cost of stranded assets), because the growing residual will be very unpopular.	ENA
575 The residual will create very high wealth transfers, which will undermine investor confidence, and undermine the durability of the regime by contributing to lobbying and disputes. This could lead to investor flight.	EA Networks
576 The TPM needs to take into account the cost of contractual payments for distributed generation as a result of the ACOT proposal. These costs should be added to the residual.	NZ Energy

Optimisation

Submission	Submitter(s)
577 Adding in the cost of optimisation to the residual will increase the residual charge, putting more pressure on marginal industries to install distributed generation. This is a perverse incentive.	Electric Power Optimisation Centre
578 Any revenue not recovered due to optimisation should be allocated to a separate optimisation charge. This would disincentivise inefficient grid over-build by increasing transparency.	Oji Fibre Solutions
579 If the Authority proceeds with its proposal, optimisation should be replaced with a benefit cap at aggregate positive net benefit. That would obviate the need for optimisation, and reduce the risk that customers would either face prices that are more than their benefit, or be able to transfer costs to other parties (in circumstances in which benefits exceed non-optimised AoB charges).	Transpower
580 Non-transmission customers should also be able to request the optimisation of an asset.	Fonterra
581 Optimisation is a significant, costly, and distracting task.	Transpower
582 Optimisation may increase the potential for customers to game the system, and will reduce incentives for Transpower to manage its commercial risk. Therefore, the threshold for optimisation needs to be clear.	Unison
583 Optimisation should be available for assets in the residual as well as assets in the AoB.	Oji Fibre Solutions
584 Optimisation should be tied to efficient utilisation, not the value of assets (for example, based on the difference between built capacity and the capacity required to meet peak demand). The guidelines should require reporting on asset utilisation factors to ensure transparency, and assist customers to identify optimisation opportunities.	Oji Fibre Solutions
585 Parties may face incentives to game the optimisation mechanism by inefficiently disconnecting earlier than would otherwise be the case.	NERA for Meridian
586 Parties will be able to game the AoB charge by applying to have assets optimised. This may increase the size of the residual. This will increase risks to durability.	ENA
587 Support optimisation.	Fonterra, Meridian
588 Support optimisation for large eligible investments, as it is workable and does not cause excessive price shocks.	Nova Energy
589 Supports optimisation of asset values for the AoB charge where use of these assets changes materially.	Buller Electricity
590 The Authority should consider allowing optimisation if asset utilisation falls below expected levels.	Business NZ
591 The Authority should consider what would happen in relation to optimisation if the exit of a customer would not result in a reduction in the use of grid assets. The Authority should also consider what would happen if the exiting party had previously benefited from a prudent discount policy.	Contact Energy
592 The Authority should provide guidance on whether optimisation would be available at the outset if multiple parties want a load augmentation, but at different times, such that Transpower could build the entire load augmentation at the outset, instead of incurring greater costs to meet the load need incrementally. The Authority should also provide guidance regarding whether a customer with a CIC could trade its spare capacity.	Fonterra

Submission	Submitter(s)
593 The guidelines erroneously imply that optimisation would be available both when a specified time has passed and when ORC for the assets is less than 80% of the RC for the asset. This is inconsistent with paragraph 7.155 of the TPM second issues paper.	PwC for 14 EDBs
594 The guidelines should allow parties to seek an independent review of optimisation decisions.	Oji Fibre Solutions
595 The optimisation mechanism may affect the grid investment approval process, because knowledge that there is an option to exit without cost might affect information revelation incentives.	NERA for Meridian
596 The optimisation proposal could provide an undue opportunity for Transpower to inefficiently favour grid options over other alternatives. This could be harmful to competition.	NZ Steel
597 The optimisation provisions should apply to connection assets if there is a material change in their use, for example, Buller Electricity should be able to access optimisation for the Inangahua Orowaiti lines, that are underutilised now that the cement plant has closed down.	Buller Electricity
598 There is not enough transparency in the proposed optimisation regime. If the optimisation proposal goes ahead, Transpower should be required to identify costs and returns on non-optimised but under-utilised assets, as well as costs shifted to the residual through optimisation.	NZ Steel
599 The rules for optimisation appear to be arbitrary and limited. For example, they would not be permitted where a reduction was due to multiple disconnections.	Transpower
600 The TPM is not the right tool to regulate optimisation, because it would obscure Transpower's poor investment choices. Transpower should not make decisions regarding optimisation without the accountability and risk of doing so. Any optimisation should be done by the Commerce Commission.	Electric Power Optimisation Centre, PowerNet

PDP

Decisions on prudent discounts

Submission	Submitter(s)
601 An independent, appropriately qualified person should make recommendations to the decision-making body. The independent expert should be mutually agreed between the decision-making body for material risk of disconnection, and the applicant.	Pacific Aluminium
602 A regulator such as the Authority should make final decisions on prudent discounts.	NZIER for MEUG
603 Given the economy-wide implications of the PDP proposal, a body such as MBIE should consider and design the PDP mechanisms.	NZ Steel
604 If prudent discounts are linked to commodity prices, those administering the PDP would need to become commodity price experts. This will either lead to a problem of asymmetric information, or magnify administrative costs.	Business NZ
605 If the PDP is expanded, an independent person should make decisions about prudent discounts.	ENA, Fonterra, Network Waitaki, Nova Energy, TNT2
606 If the PDP is expanded, an independent person should make the final decisions about prudent discounts, because the decisions are economic rather than technical.	Oji Fibre Solutions
607 If Transpower has discretion in relation to the PDP, there needs to be procedural safeguards against Transpower's errors or omissions, including an adequate right of appeal.	Nova Energy
608 If Transpower is involved in making decisions about prudent discounts, it needs clear guidelines.	TNT2
609 If Transpower makes decisions about the PDP, it needs clear principled guidance, and the Authority needs to consider the transaction costs involved.	ENA
610 It will be very difficult for Trustpower to assess the merits of claims, because it will face asymmetry in information. This could give rise to significant costs for Transpower.	HoustonKemp for Trustpower
611 More parties will likely ask for a prudent discount.	HoustonKemp for Trustpower
612 Prudent discounts should be decided by the Authority or (better) a central government department such as MBIE.	Unison
613 The Authority, or better, perhaps an even higher level decision-maker (such as a Minister) should make decisions on the expanded PDP.	Orion
614 The Authority is a regulatory body, so should not decide prudent discounts.	Fonterra
615 The Authority must consider the risk of information asymmetry in applications for material risk of disconnection prudent discounts.	Fonterra
616 The Authority or another party other than Transpower should make those final decisions.	Buller Electricity
617 The Authority should make decisions about whether to grant prudent discounts if the PDP is expanded.	Auckland Airport, Meridian, Norske Skog, NZIER for MEUG
618 The Authority should not make decisions about prudent discounts under an expanded PDP policy.	Buller Electricity

Decisions on prudent discounts

	Submission	Submitter(s)
619	The Authority should not make decisions about prudent discounts under an expanded PDP policy because it does not have the capability/skills to do so, for example, in relation to assessing commercial matters.	Axiom for Transpower, EA Networks, KCE, Top Energy, Transpower
620	The Authority should not make decisions about the PDP under an expanded PDP policy, because it does not have the right incentives to do so.	Axiom for Transpower, EA Networks
621	The Authority would be better placed to make decisions on an expanded PDP. The decision-maker needs to have guidelines and processes that are published in advance.	PwC for 14 EDBs
622	The decision-maker would/may face information asymmetry problems if the PDP regime is expanded, which would mean that the decision-maker would not be able to accurately assess prudent discount applications.	Business NZ, Fonterra, HoustonKemp for Trustpower, Mighty River Power, Orion, Powerco, Transpower
623	The government is in the right position to make decisions of the kind contemplated by the material risk of disconnection PDP. That is because it can consider a wider range of matters.	Axiom for Transpower
624	To mitigate the fact that Transpower may not have the incentives to decide prudent discounts, the guidelines and design of the prudent discount policy regime need to ensure that the decision-maker has the obligation to consider the application in good faith taking into account all the facts and circumstances. This may include Transpower being required to provide information in relation to prudent discounts.	Pacific Aluminium
625	Transpower should not make decisions about prudent discounts under an expanded PDP.	Buller Electricity, Network Waitaki, Orion, TNT2
626	Transpower should not make decisions about prudent discounts under the expanded PDP, because it does not have the capability/skills to do so (for example in relation to assessing commercial matters).	Axiom for Transpower, EA Networks, HoustonKemp for Trustpower, KCE, Meridian, NZ Steel, Pacific Aluminium, PwC for 14 EDBs, Top Energy, Transpower, Unison
627	Transpower should not make decisions about prudent discounts under the expanded PDP, because it does not have the right incentives to do so.	Auckland Airport, Axiom for Transpower, Business NZ, ENA, Fonterra, HoustonKemp for Trustpower, Nova Energy, NZ Steel, Pacific Aluminium, Transpower, Waitaki Power Trust
628	Transpower should not make decisions on economic aspects of the PDP outside the national grid, as they are decisions about benefits to New Zealand as a whole.	Contact Energy

Material risk of disconnection

	Submission	Submitter(s)
629	A better alternative to the material risk of disconnection extension would be to treat transmission assets used for the majority of time to connect a customer as if they were dedicated connection assets. See further Castalia for Genesis.	Genesis Energy
630	Do not agree with expanding the PDP for direct load customers, as it is a subsidy. If prudent discounts are available to direct-connect customers, there should be significant scrutiny over such discount applications and an ability for other customers to appeal.	Top Energy
631	Do not support extending the PDP to cover a material risk of disconnection, as it is a subsidy.	Counties Power, Molly Melhuish

Material risk of disconnection

Submission	Submitter(s)
632 Do not support extending the PDP to cover a material risk of disconnection, as it is a subsidy. It would discriminate against NZ-based companies, because only international businesses appear to qualify.	Fonterra
633 Do not support extending the PDP to cover a material risk of disconnection. Doing so would be inefficient because it would shift commodity risk to the wider electricity industry, and may lead to a domino effect as increases in the residual place other transmission customers under pressure. Instead, the Authority could consider offering a targeted discount to customers who largely use a particular line or asset.	Castalia for Genesis
634 Do not support prudent discounts for a material risk of disconnection, because it is a subsidy.	Castalia for Genesis, KCE, Pioneer, Vector
635 Extending the PDP will promote competition by incentivising a greater number of competitors to remain in the market. This will have flow-on competition benefits.	Meridian
636 If the Authority proceeds with a prudent discount policy, a mechanism in which parties pay increased charges when commodity prices rebound could be appropriate.	EA Networks, Pacific Aluminium
637 If there are good reasons to provide relief to load customers, these decisions should be made by a suitably empowered branch of the government, as it has better information, as well as obligations to be transparent. The Authority's Rulings Panel or the Commerce Commission are both well placed to make these kinds of decisions.	Genesis Energy
638 If there is a net benefit to New Zealand from a party receiving financial relief, it is reasonable that the government would do this without Transpower or the Authority needing to offer a discount. That means that the TPM is not the right place to address such matters.	Axiom for Transpower, EA Networks, Nova Energy
639 In assessing whether a plant has done everything in its power to remain viable, the Authority should be wary of requiring intrusive information about specific business decisions, as it could be commercially sensitive.	Pacific Aluminium
640 It is not clear whether the PDP is meant to apply to an entire business, a particular site, or a new entrant that would not otherwise enter the market. It is important that the PDP does not discriminate against parties with multiple sites.	Business NZ
641 It is not within the Authority's mandate to use the TPM to provide for a PDP for material risk of disconnection and/or the TPM is not the right place to regulate the viability of commercial operations.	KCE, Unison , Vector
642 Linking prudent discounts to "key factors" is difficult because the decision to close a plant is based on many variables. The guidelines should require that transmission charges are "a cause" rather than "the cause" of disconnection.	Pacific Aluminium
643 Linking the discount to commodity prices may be difficult. Any linkage should be periodic to give cost certainty.	Pacific Aluminium
644 Prudent discounts should be available where distributed generation could provide for a network to disconnect from the grid, even if that was not the reason for building the distributed generation.	Top Energy
645 Support extending the PDP for material risk of disconnection.	Meridian
646 Support extending the PDP for material risk of disconnection. However, the PDP should not be available as a subsidy to a large number of customers.	Meridian

Material risk of disconnection

Submission	Submitter(s)
647 Support linking prudent discounts to key factors affecting a consumer's profitability, but this should not be so tightly calibrated as to turn the business into a regulated entity or keep the business permanently on the margin of closure.	Meridian
648 The Authority needs to consider the following: the application of prudent discounts for multiple linked companies; the application of the PDP to joint venture partners; how to deal with highly commercially sensitive information; and how to deal with forward-looking information. This means that the PDP should not be highly prescriptive, as that may mean that a prudent discount is not available for parties that are generally at risk of closure.	Pacific Aluminium
649 The Authority should analyse the benefits that could occur from decreased wholesale prices if a business closed, and compare this with the potential increase in transmission charges in that scenario.	Fonterra
650 The criteria for the material risk of disconnection PDP are not rigid, specific, or objective enough.	Auckland Airport
651 The criterion that transmission costs be in the material portion of the customers' input costs or business profits would not clearly apply to a business that is making a loss. The purpose of a test is to determine whether alleviating the transmission price would materially reduce the risk the plant faces.	Pacific Aluminium
652 The discount may run counter to New Zealand's obligations under various international trade treaties.	Orion
653 The extension of the PDP is likely to encourage a much larger number of businesses to seek PDP. This could erode Transpower's revenue base.	HoustonKemp for Trustpower
654 The material risk of disconnection PDP does not take into account the counterfactual, for example, if the exiting firm, would be replaced by a more efficient firm or if wholesale prices would be affected.	Axiom for Transpower
655 The material risk of disconnection PDP would create a risk that parties would game the PDP regime. This could lead to inefficient discounts, leading to a higher residual.	Axiom for Transpower, Genesis Energy, Mighty River Power, Powerco, Transpower, Unison
656 The proposal is unworkable because many parties (for example, consortiums of dairy farmers) could be eligible for a prudent discount.	Axiom for Transpower, EA Networks
657 Transpower has serious misgivings about the proposal to allow prudent discounts for a material risk of disconnection. There is a risk of double dipping with other discounts or subsidies. It would reward poor choices by businesses, potentially reducing competition.	Transpower

Other

Submission	Submitter(s)
658 Agree that a prudent discount should be available if charges exceed standalone cost.	Castalia for Genesis, Meridian, Pacific Aluminium, Transpower
659 Agree that a prudent discount should be available where it would be privately beneficial to build generation to disconnect from the grid.	Meridian, Transpower
660 Agree with setting a floor for the PDP at incremental cost.	Transpower
661 Any prudent discount should be time bound. This could involve a negative discount if the financial position of the applicant fluctuates.	Orion

Other

Submission	Submitter(s)
662 A prudent discount should be available in all situations in which a customer might inefficiently avoid using the grid, including by reducing load, reducing consumption, or making decisions not to increase load.	Pacific Aluminium
663 Conservatively support extending the PDP.	Business NZ
664 Distributed generators that experience hardship as a result of the DGPP proposals should be able to access prudent discounts.	NZ Energy
665 Do not support extending the PDP.	Vector
666 Do not support extending the PDP. It will increase the cost to Transpower.	Unison
667 Do not support extending the PDP. It would be unfair to smaller consumers, and this may lead to durability problems.	Orion
668 Do not support extending the PDP. The PDP will result in a TPM with the same problems as the current interconnection charge, at the cost of the grid being under-utilised.	Vector
669 Do not support extending the PDP because it is not practical.	Powerco
670 If a PDP is extended, there should be safeguards, such as a clawback mechanism, to prevent misuse of the PDP by large industrials to the detriment of the electricity market.	Network Waitaki
671 If a prudent discount is granted, the amount of that discount should not go back into the residual, as that would not be cost-reflective. Consideration should be given to adding this amount to the AoB charge instead.	Gore District Council, Invercargill District Council , Southland District Council, Venture Southland
672 If the PDP is extended, the Authority needs to consider whether the assessment includes wider economic effects or just transmission costs.	Orion
673 If the PDP is extended, the process and decision-making needs to be subject to very firm transparency rules.	Orion, Unison
674 It may be equitable to link discounts to commodity prices or market conditions. Another option would be for the direct consumer to pay the discount back if commodity prices exceed a certain level and the direct consumer's financial position improves.	Contact Energy
675 Support a prudent discount being available to distributors for inefficient disconnection.	Meridian, PowerNet, TNT2
676 Support extending the PDP, because it would address the fact that customers would face inefficient pricing under the TPM.	E-Type Engineering, Grey Power Southland, Market South, McIntyre Dick and Partners, Otago Chamber of Commerce, Otago Southland Employers' Association, Preston Russell Law, Sarah Dowie, South Port New Zealand, Southland Chamber of Commerce, Southland Manufacturers Trust, Stabcraft Marine
677 Support extending the PDP, because the threshold for the current PDP is too high.	Gore District Council, Invercargill District Council , Southland District Council, Venture Southland
678 Support extending the PDP, including the additional eligibility criteria the Authority has proposed.	Meridian

Other

Submission	Submitter(s)
679 Support extending the PDP.	Contact Energy, Meridian, NERA for Meridian, Norske Skog, Northpower, Oji Fibre Solutions, Pacific Aluminium
680 Support extending the PDP in relation to as generator's 'alternative project', but do not support the TPM providing for prudent discounts to prevent a major customer exiting the market 'but for' a price reduction, because such matters are more appropriately dealt with by government and because the PDP would be unworkable.	EA Networks
681 Support prudent discounts being applicable for the life of the relevant asset.	Meridian
682 The Authority appears not to be treating businesses equally in the design of the PDP, as it offers relief to larger businesses without offering relief to smaller businesses, households, generators, or distributed generation owners.	Trustpower
683 The Authority should clarify the definition of "asset" for the purposes of the PDP.	Meridian, Pacific Aluminium
684 The Authority should consider expediting the prudent discount application process prior to implementing the broader TPM, as the PDP regime could be crucial to a business's decision to continue operations.	Meridian
685 The Authority should continue working with Transpower to achieve a practical and implementable PDP.	E-Type Engineering, Grey Power Southland, Market South, McIntyre Dick and Partners, Otago Chamber of Commerce, Otago Southland Employers' Association, Preston Russell Law, Sarah Dowie, South Port New Zealand, Southland Chamber of Commerce, Southland Manufacturers Trust, Stabicraft Marine
686 The Authority should require Transpower to consider a broad range of design options for the PDP.	Pacific Aluminium
687 The Authority's logic is that parties who disbenefit currently do not oppose investments and this leads to inefficient investment. On the same logic, the PDP regime will be inefficient and will lead to many PDPs being granted. This inefficiency has not been included in the CBA.	PwC for 14 EDBs
688 The Authority's proposal to suspend discounts if the underlying factors change may not be feasible in practice, and would require a lot of monitoring.	Auckland Airport
689 The criteria for the PDP might be too difficult/rigid to meet.	Contact Energy, Oji Fibre Solutions, Refining NZ
690 The current proposal for the PDP does not appear to be workable. Transpower should be given flexibility to develop a PDP that is practical, workable and able to be implemented.	Norske Skog
691 The emphasis of the PDP is short-term and ignores the adverse long-term consequences of enabling inefficient loads to operate. This may create a domino effect by increasing the residual charge.	Electric Power Optimisation Centre
692 The extension of the PDP could increase the cost of energy to those areas already at risk of significant price interests. It could also undermine the durability of the TPM by creating a mechanism for inadvertently supporting self-serving interests.	Genesis Energy letter

Other

Submission	Submitter(s)
693 The need for a PDP indicates that there are problems with the Authority's proposed TPM. Submitters identified that it indicated that there were problems with the allocation of sunk costs, and problems with durability.	Auckland Airport, EMA, Norske Skog, Refining NZ, TECT, Transpower, Vector
694 The PDP could create incentives for Transpower to impede efficient competition by emerging technologies.	NZ Steel
695 The PDP is not durable. It will increase administration costs to Transpower. There is too much uncertainty in the PDP proposal.	ENA
696 The PDP may undermine incentives for large customers to scrutinise investments, essentially leading to predatory pricing. The draft guidelines do not deal with this risk.	NZ Steel
697 The PDP might disadvantage small load customers. Many distributors are concerned that the PDP is a subsidy for direct connect customers.	PwC for 14 EDBs
698 The PDP regime does not appear to be practicable, given the high thresholds for PDPs, and internal inconsistencies.	NZIER for MEUG
699 The PDP regime should be implemented at the same time as the new TPM comes into force.	Norske Skog
700 The PDP regime would be administratively complex.	Pioneer
701 The PDP should extend to distributors that can use existing distributed generation to disconnect from the grid, where a distributor could inefficiently bypass transmission investment in a way that is privately beneficial but socially inefficient.	PwC for 14 EDBs
702 The problems that the Authority has identified (for example, direct consumers paying more than the total cost of supply) are better addressed in the PDP than by changing the whole TPM.	Air Liquide
703 The proposed PDP second-guesses Parliament's decisions regarding what "beneficial investments" are expressed in section 54Q of the Commerce Act, which promotes investment in energy efficient technologies and demand-side management.	ETNZ
704 There is too much uncertainty in the PDP proposal. More clarity is required, including further measures for transparency.	Northpower
705 There is too much uncertainty in the PDP proposal for it to be possible to determine whether it will be of use to NZ Steel. For example: whether a complete exit is necessary; how to determine causation; whether there is a "but for" test; whether the benefit lasts only while the market is imposing non-continuation; the impact on lending; prudent discounts where there is no alternative investment; dealing with medium to long-term unviability of businesses; materiality of input costs; and the definition of "business" uncertainty in the "reduce or suspend a discount" provision. The uncertainty in the PDP compounds the existing uncertainty that NZ Steel faces.	NZ Steel
706 The TPM is not the right place to assist struggling businesses. There other avenues that are better suited to resolve these issues.	KCE
707 Transpower should have a one-off ability to grandfather existing charges, instead of implementing a complex prudent discount policy.	Counties Power

Additional components

Staged commissioning

Submission	Submitter(s)
708 Support the inclusion of the staged commissioning component as an additional component.	Meridian
709 The staged commissioning component does not appear to be necessary now that there is precedent and case law on the matter.	PwC for 14 EDBs

Charging for assets when classification changes

Submission	Submitter(s)
710 Agree that there is a problem in relation to assets commissioned in a loop. Transpower should consider the matter further and develop a workable solution. However, in general, additional components should not be introduced unless it is very clear that they are required.	PwC for 14 EDBs
711 Support including, as an additional component, a method to ensure that charges that apply to assets that provide connection services are not affected by an investment that connects connection assets to assets owned by Transpower.	Meridian
712 There is no problem in relation to assets commissioned in a loop. For example, the Authority's ruling that the Hangatiki-Te Awamutu circuit is part of the interconnected grid is the correct outcome, and the TPM should not change this.	Waipa Networks

Charging for operating and maintenance on actual cost basis

Submission	Submitter(s)
713 Allocating operating and maintenance costs on an actual cost basis would increase the beneficiaries-pay component of transmission charges.	Winstone Pulp
714 Do not support allocating operating and maintenance costs on an actual cost basis. Doing so would increase cost and complexity for Transpower, which would increase costs for all parties. It would also be likely to increase the variability of charges over time.	PwC for 14 EDBs
715 Support allocating operating and maintenance costs on an actual cost basis.	Fonterra, Meridian, Winstone Pulp

LRMC charge

Submission	Submitter(s)
716 An LRMC charge as an optional charge based on MIC would provide an insufficient price signal that would be seen too late.	CEC for Trustpower
717 An LRMC charge should encourage customers to seek efficient alternatives to replacement and refurbishment investments.	Oji Fibre Solutions

LRMC charge

	Submission	Submitter(s)
718	An LRMC charge would provide a delayed demand response price signal. A combined RCPD based/capacity based residual charge would result in demand response from mass-market load being much quicker and more effective.	Network Tasman
719	If Transpower has discretion in relation to an LRMC charge, there needs to be procedural safeguards against Transpower's errors and omissions, including an adequate right of appeal.	Nova Energy
720	Support (or support the investigation of) an LRMC charge to complete price signals, to signal the value of new investments.	Eastland Generation, Norske Skog
721	Support an LRMC charge. The implementation issues in an LRMC charge are surmountable.	Orion
722	Support a standalone LRMC charge, because economic investment signals are essential for grid investment.	ENA
723	Support the inclusion of an LRMC charge as an additional component.	Meridian
724	The Authority has indicated that the AoB charge will have a similar effect to an LRMC charge. If that is the case, an LRMC charge does not appear to be necessary.	Business NZ, PwC for 14 EDBs
725	The Authority should consider an LRMC charge, as it is an option for managing peaks. It is concerning that LRMC can potentially reach zero for the assessment of benefits.	KCE
726	The combination of an LRMC and AoB charge could result in double recovery. For this reason, if the Authority proceeds with its proposal, the LRMC charge should be attributed to the AoB, rather than to the residual.	Transpower
727	The guidelines should not leave an LRMC charge to Transpower's discretion. The Authority should require Transpower to develop the LRMC charge as part of the initial TPM in anticipation that it could be applied in the future when necessary.	Oji Fibre Solutions
728	The uncertainty regarding whether an LRMC charge will be introduced, the form it will take, and how long it will be in place undermines incentives for large commercial and industrial customers to make investments.	Network Tasman
729	To avoid over-signalling the LRMC of transmission, an LRMC charge could be based on a zonal formula, based on RCPD zones. The combination of an LRMC approach with nodal prices would be ideal. This would result in the residual charge being reduced to around 22% of the total revenue, which would be desirable.	Eastland Generation, Norske Skog

Kvar charge

	Submission	Submitter(s)
730	A kvar charge may not be necessary. The costs of a kvar charge may outweigh its benefits.	PwC for 14 EDBs
731	If a kvar charge is introduced, generators should pay the kvar charge, because it is consistent with normal market behaviour for generators to meet the costs of maintaining their products in a merchantable state.	ETNZ
732	Support the inclusion of a kvar charge as an additional component.	Fonterra, Meridian

Loss and constraint excess

	Submission	Submitter(s)
733	Support providing for LCE in the Code. However, a difference in treatment between connection and AoB assets may give rise to an inefficient preference for connection assets. There is no "muting" or "gaming risk" for LCE. Also support a monthly averaging period. Support the use of LCE to offset transmission charges by allocating LCE to specific assets.	Meridian
734	Support the Authority's LCE proposal provided that the administrative costs would not be too high.	PwC for 14 EDBs
735	Support the use of LCE to offset transmission charges by allocating LCE to specific assets.	NERA for Meridian

Power factor of 0.95 lagging

Submission	Submitter(s)
736 Support the power factor being set at 0.95 in all regions, as the current unity power factor is impossible to achieve. This is a change that could be progressed now without waiting for the rest of the TPM to be finalised.	PwC for 14 EDBs
737 Support the power factor being set at 0.95 in all regions. The reduction of the power factor to 0.95 is sensible, realistic, and supported by the distribution industry.	ETNZ

Alternatives

Submission	Submitter(s)
738 Consideration of the status quo is good regulatory practice, and would be consistent with views expressed in submissions.	Trustpower
739 EPOC is investigating an alternative transmission pricing proposal which explicitly prices transmission flows within SPD, and recovers costs directly from the beneficiaries of a transmission expansion, without relying on the construction of the counterfactual scenario. Examples of this are included in the submission.	Electric Power Optimisation Centre
740 More should be done to encourage power use and storage at peak times.	Grant Crawshay
741 More should be done to encourage the use of solar power.	Dale Morrow
742 Prefer a modified RCPD charge with no residual. Other alternatives could include: a tilted postage stamp charge, which would be better than the proposed reform because it would provide Transpower with the flexibility to send efficient explicit ex-ante signals to customers and would also facilitate the wealth transfer the Authority is seeking without additional costs; or a modified AoB charge with a residual based on historical RCPD, which could be a good option if the Authority remained determined to remove the HVDC and RCPD charge and introduce an AoB charge. If that was the case, the AoB charge should be applied to new investments only, and the residual charge should be allocated on a weighted average of historical RCPD.	EA Networks
743 Support a tilted postage stamp approach. A tilted postage stamp method is based on an exacerbator-pays philosophy, which ranks higher on the decision-making and economic framework, and would provide a forward-looking price signal that would be superior to the Authority's proposal, and would also be superior to the optional LRMC pricing method. A tilted postage stamp method would be transparent and stable, would not be predicated on unstable benefit-allocation methods with resets, and would be more durable because it would not create the same price shocks as AoB charges. It would perhaps be less efficient from a planning perspective than an AoB charge. However, it is not clear whether the benefits in relation to planning efficiency are real, as indicated by Oakley Greenwood's lack of substantiation. The Authority has dismissed a tilted postage stamp charge because it is less service-based, less accurate and may promote inefficient grid use. However, on the service-based point, the service-based principle is just a restatement of beneficiaries-pay. On the accuracy point, the AoB charge price signal will not be accurate because the price signals will be too late for parties to respond to them. If a tilted postage stamp method promoted inefficient grid use it could be structured in a way to include fixed charges, even though they may not actually be desirable.	CEC for Trustpower
744 The Authority should further investigate Transpower's alternative proposal.	Genesis Energy letter
745 The Authority should have considered a stable LRMC charge or a tilted postage stamp charge, which would generate a forward looking price, be more transparent, be more stable, and address some of the inequities with the Authority's proposal. This would be preferable to, and more effective than, transitional arrangements.	Trustpower

Submission	Submitter(s)
746 The Authority should implement a simplified, staged approach to TPM reform, including a simplified AoB charge allocation for most capital costs of interconnection assets, a peak-basis charge such as an LRMC charge, a residual to cover unallocated and common costs, a "standard" or non-simplified AoB charge (as an additional component), and extended locational prices for generation (as an additional component). The simplified, staged approach could include the Authority's additional proposals (such as the kvar charge), and could be implemented with or without a transition. It would be pragmatic and workable, would unlock the potential benefits of reform sooner, would result in lower costs, and would reduce the risk of problems delaying the project. The simplified staged approach would be simpler, would apply the AoB charges more broadly, provide conventional explicit ex-ante dynamic price signals, and avoid the risk that charges do not provide the intended locational signal for generators. Also, this simplified, staged approach would result in lower implementation costs, could result in higher net benefits, and could be implemented by 1 April 2018 (a timeline is included in Transpower's submission along with a comparison of implementation timelines and price implications of the simplified staged approach).	Transpower
747 The Authority should not proceed with the proposals.	Auckland Federated Farmers
748 The Authority should reject the proposals and develop a revised TPM.	ETNZ
749 The Authority should retain the status quo.	Air Liquide, Girdwood Consulting for Trustpower, Newmarket Business Association , Northland Inc, Northland Mayoral Forum, Northpower, NZ Steel, Onehunga Business Association, Pacific Leadership Forum, Powerco, PwC for 14 EDBs, Refining NZ, South Harbour Business Association, TECT, Top Energy, Westpower
750 Tilted postage stamp charges are similar to long-run AoB charges, in that the regional price differences under the AoB charge is likely to broadly reflect long-run marginal cost, as is the case for a tilted postage stamp method. However, a tilted postage stamp method is better because it gives better outcomes in the short-run, and is more stable and durable.	CEC for Trustpower
751 Transpower should be requested to develop more flexible transmission pricing mechanisms that ensure security of supply while enabling further incremental change.	Pioneer
752 Transpower should be required to modify the RCPD prices to dampen the RCPD cyclical price nearer to a long-run average. The long-run average LRMC could be set by the Commerce Commission as part of the Transpower pricing quality revenue path. The regional SRMC could be managed more directly by Transpower, who would contract for up to 5 years with providers, and include the current economic and security dispatch options being run as part of the current Transpower DSR programme.	Pioneer

CBA

Method

	Submission	Submitter(s)
753	The Authority has not defined its decision-making with enough certainty to constitute a robust decision, as indicated by words such as "assume", "estimate", "appears to meet", and "requires some judgement".	NZ Energy
754	The Authority has provided very little information regarding the long-term effects of retaining the current TPM.	Air Liquide, KiwiRail
755	The Authority's CBA is robust, and shows that the Authority's proposal will have large positive net benefits.	Meridian
756	The Authority should request Oakley Greenwood to respond to the comments in the Axiom report.	Transpower
757	The CBA consultation is inadequate. The assumptions that underlie the CBA were in two spreadsheets that were very complex and opaque. In addition, the Authority updated its website with further information about CBA assumptions one week prior to submissions closing.	HoustonKemp for Trustpower
758	The CBA does not adequately assess alternatives/options. Submitters identified that the CBA did not adequately consider the following alternatives: transitional arrangements; modified status quo; status quo.	Network Waitaki
759	The CBA does not adequately assess alternatives/options. Submitters identified that the CBA did not adequately consider the following alternatives: transitional arrangements; modified status quo; status quo; tilted postage stamp.	CEC for Trustpower, HoustonKemp for Trustpower, Marlborough Lines, MEUG, Network Waitaki, Trustpower
760	The CBA does not adequately consider the allocation of historical costs under the proposed AoB charge. The only CBA undertaken appears to be a statement that the charge "would reduce (but not eliminate) the risk that prices will breach the standalone and incremental cost tests".	Counties Power
761	The CBA does not adequately reflect that the proposed TPM could be applied in different ways, with different outcomes.	Unison
762	The CBA does not consider how service and cost-reflective infra-marginal prices would create benefits. This means that the CBA provides little insight to inform the TPM design issues, including whether to increase the eligible investments, whether to include overhead costs in the AoB, whether to use a capacity/proximity residual charge, whether to broaden the base for the allocation for the residual charge, and changing the PDP. In this regard, Oakley Greenwood maintains that the cost of existing investments should not materially influence economic efficiency, but charges for an existing service are not a tax and an efficient infra-marginal pricing signal is essential to the Authority's objectives. Oakley Greenwood has adopted a conceptual approach, which varies from the decision-making and economic framework.	Pacific Aluminium
763	The CBA fails to adequately take into account reliability (cost of outages occurring if deferral of investments results in investments being made too late).	PwC for 14 EDBs
764	The CBA fails to take into account how distributors and retailers will variablise/pass-through charges.	NZ Steel, PwC for 14 EDBs, Unison
765	The CBA includes benefits that would arise in both the factual and the counterfactual (for example, in relation to diesel generation and additional investments). These should not be counted.	HoustonKemp for Trustpower, Pioneer, PwC for 14 EDBs
766	The CBA is based on assumptions that have been provided to Oakley Greenwood by the Authority, creating outputs that support the proposals.	KCE

Method

Submission	Submitter(s)
767 The CBA is inadequate. It fails to consider the efficiencies of different applications of the proposal, does not consider how the proposal will be implemented, and makes incorrect assumptions. This is an error of process.	Mighty River Power
768 The CBA is materially better than previous CBAs in that it is more bottom-up, considers a counterfactual, and engages external specialist advice.	Castalia for Genesis
769 The CBA is modelled on a TPM that does not adequately reflect the Authority's proposal. It is based on a (more generic) LRMC charge, which is different to an AoB charge. This means that the CBA does not establish the benefits of an AoB charge.	Axiom for Transpower, EA Networks, HoustonKemp for Trustpower, Pioneer, Transpower, Trustpower
770 The CBA is not robust. It uses a modelling appropriate that is not fit for purpose. It uses a sub-optimal method of predicting build order, it does not use market modelling tools to determine generator entry, it assumes that new generation can be fully relied upon for its entire capacity to contribute to serving peak load (which is not reasonable), it uses an artificial and highly sensitive analytical framework to estimate the benefits of avoiding inefficient bypass, and it makes an unreasonable assumption that the TPM will reduce costs.	Trustpower
771 The CBA is not robust. The CBA has not been conducted consistently with best practice for a CBA, including the Authority's own guidelines for producing a CBA. It is not top-down as well as bottom-up, there is no causal link between the proposal and the benefits, it has not assessed final prices (as expected from the CBA working paper), and there has not been adequate sensitivity analysis, including to changes in demand.	HoustonKemp for Trustpower
772 The CBA needs to give wider consideration to impacts outside grid pricing and the sector in general.	KCE, Top Energy
773 The CBA should be conducted at a more granular level (EDB or GXP) to identify possible outcomes.	ENA, PwC for 14 EDBs
774 The CBA should be more focused on the marginal impacts of the proposals.	Castalia for Genesis
775 The legal requirements for consultation are that the proposal should be supported by expert opinion and empirical evidence. The Authority cannot circumvent an efficiency analysis by relying on economic doctrine. There is also need for a sensitivity analysis. See Telecom Corporation of New Zealand v Commerce Commission, Godfrey Hirst v Commerce Commission, and Wellington International Airport Limited v Commerce Commission.	Trustpower
776 The problems with the CBA are evidence of why the Authority should not prescribe prescriptive rules. To model a fit for purpose CBA, the Authority could model its preferred charge under a range of scenarios based on reasonable assumptions as to detail, in the knowledge that Transpower will have their responsibility to decide actual design parameters. Alternatively, it could undertake a generic CBA as to the possible outcome of a generic long-run price signalling charge, and if the analysis is positive in a sufficient number of scenarios, recommend that Transpower select the most suitable long-run pricing option.	Trustpower
777 There is insufficient modelling to support the benefits of removing the HVDC charge, including a risk of double-counting those benefits with the benefits of providing LRMC signals to new generation.	HoustonKemp for Trustpower
778 Unable to observe how the benefits of the HVDC were derived as not enough information was provided.	HoustonKemp for Trustpower

Assumptions

Submission	Submitter(s)
779 Despite uncertainty/complexity in Oakley Greenwood's benefit estimation, Oakley Greenwood CBA is informative, as it contains enough quantification to give an indication of the costs, benefits, and the magnitude of benefits.	NERA for Meridian
780 Given the small amount of net benefits, the sensitivity to assumptions that appear to be erroneous, and the comparable quantitative benefits of the deeper connection charge, the CBA for the proposal does not appear to have been adequately assessed.	NZIER for MEUG
781 If the Oakley Greenwood modelling is corrected for inaccurate assumptions, the net benefits could be as low as -\$1,108.7M. This indicates that the TPM could lead to a significant cost.	Trustpower
782 It is not clear why the modelling of AMD was based on 2014 data only.	NZIER for MEUG
783 Removing generation projects that have been permanently abandoned from the CBA would significantly reduce the benefit under the CBA.	Pioneer
784 The \$10M NPV benefit from an expanded prudent discount policy is based on a 10% probability of an improvement in NZAS's profits. However, this is flawed because other customers would apply for prudent discounts, which would expand the residual, making charges less cost-reflective and less service-based.	PwC for 14 EDBs
785 The \$13M NPV benefit of removing the HVDC charge is based on simplistic assumptions as it does not reflect the additional AoB charge that generators would face under the TPM and would take into account in investment decisions.	PwC for 14 EDBs
786 The assumptions in the CBA (for example, that the AoB charge would succeed in improving scrutiny incentives and signalling grid investment costs) are reasonable.	NERA for Meridian
787 The Authority has failed to take into account how distributors and retailers will interact (eg, the transaction costs arising from distributors needing to renegotiate contracts with direct-billed customers).	Alpine Energy, NZ Steel
788 The Authority has not considered the impacts of the departure of a large customer on spot prices, for the purposes of the prudent discount policy, because it would be "a wealth transfer". This is not robust reasoning. Significant changes in spot prices are likely to have flow-on efficiency impacts.	Axiom for Transpower
789 The Authority's CBA bases the benefits of future transmission investment on historical transmission investment instead of Transpower's current long-term plans. This is flawed because, for example, if South Island generation was a major beneficiary of historic transmission investment, it is unlikely to be the major beneficiary of future transmission investment.	Pioneer
790 The benefit of \$10.3M in relation to the PDP is not a benefit, but a transfer to NZAS.	HoustonKemp for Trustpower, Trustpower
791 The calculations in the CBA are based on opaque inputs provided by the Authority regarding regional demand growth rates, and some of the calculations do not add up.	PwC for 14 EDBs
792 The CBA assumes that charges (in particular, the AoB charge) will be efficient, and fails to take into account inefficiencies and distortions in the implementation of the charge (eg, allocative efficiency losses, distortions in pass through, inefficiencies in PDP, and poor ex-ante price signals from the AoB charge).	Axiom for Transpower, Castalia for Genesis, CEC for Trustpower, EA Networks, HoustonKemp for Trustpower, Mighty River Power, Network Waitaki, NZ Steel, Pioneer, Powerco, PwC for 14 EDBs, Top Energy, Transpower, Trustpower

Assumptions

	Submission	Submitter(s)
793	The CBA assumes that third parties will truthfully engage with the Commerce Commission, which is not the case.	Trustpower
794	The CBA could only justify the inclusion of a true LRMC charge. It cannot be used to justify other methodologies.	Trustpower
795	The CBA does not adequately take into account uncertainties and/or assumptions that may or may not eventuate. These should be taken into account in the CBA, for example in the sensitivity analysis.	Castalia for Genesis, ENA, Network Waitaki, Pioneer
796	The CBA does not take into account the impact of AoB charges on new entrant generators.	HoustonKemp for Trustpower
797	The CBA erroneously assumes that generation will be made on the basis of the average total cost of a unit of generation, which does not reflect the way generation investment decisions are made.	Axiom for Transpower, EA Networks
798	The CBA estimates cost and capabilities of demand response based on Transpower's demand response trial. This is inadequate as it was a pilot, experimental programme.	HoustonKemp for Trustpower, Trustpower
799	The CBA fails to take into account terminal values for assets.	HoustonKemp for Trustpower
800	The CBA fails to take into account the potential for some technologies (such as wind) not to be available at peak times.	Axiom for Transpower, EA Networks, HoustonKemp for Trustpower
801	The CBA in relation to the PDP is artificial and sensitive to assumptions, in particular the world aluminium price.	HoustonKemp for Trustpower
802	The CBA is based on a set of converging assumptions, for example in relation to future demand. If these factors do not converge, the benefits will be much lower.	ENA
803	The CBA is based on assumptions that do not hold.	Axiom for Transpower, CEC for Trustpower, EA Networks, ENA, HoustonKemp for Trustpower, Mighty River Power, NZIER for MEUG, Pioneer, PwC for 14 EDBs, Transpower, Trustpower
804	The CBA is not robust. It is not appropriate to use a generation capacity expansion model to estimate benefits, or a 30 year timeframe for HVDC and a 20 year timeframe for everything else.	HoustonKemp for Trustpower
805	The CBA mistakenly uses \$62M as the ACOT revenue instead of the correct \$52M. This would reduce the RCPD charge benefit by \$3M.	Pioneer
806	The CBA's assumptions about diesel generation are flawed, for one or more of the following reasons: they do not reflect recent generation investment patterns; they underestimate the costs of building diesel generation (eg, site costs, fuel costs); and they make a logical error in how RCPD periods work in relation to ACOT. The modelled level of diesel investment is unlikely to occur. Some submitters estimated that this could reduce the benefit under the CBA by up to \$137M.	Axiom for Transpower, EA Networks, HoustonKemp for Trustpower, NZIER for MEUG, Pioneer, PwC for 14 EDBs, Trustpower
807	The CBA should have given weight to a scenario in which Huntly Power station closes down. One submitter estimated that taking this into account would reduce net benefits by \$169M.	HoustonKemp for Trustpower, Pioneer, Trustpower
808	The extent to which expenditure is signalled to the end customer should be included as a key input assumption or sensitivity.	Pioneer

Assumptions

Submission	Submitter(s)
809 The only difference in the CBA between the AoB and deeper connection charge is the percentage inputs for capital programme impact and avoided disputation costs. This indicates that the CBA does not adequately reflect the Authority's proposal.	Pioneer
810 There are a number of fundamental errors in the CBA modelling, including the inclusion of benefits that are not likely to arise.	Vector

Costs and benefits

Submission	Submitter(s)
811 As a comparison to the Authority's estimate of upfront and ongoing implementation costs (\$3.5M), the Authority's previous estimate of implementation costs of its previous proposal was \$44.5M. The Authority has accepted this, but does not think that it affects the net benefits on a sensitivity analysis. However, if sensitivities to key assumptions that the Authority has not considered are included, the net benefits would be lower.	HoustonKemp for Trustpower
812 As a comparison to the Authority's estimate of upfront and ongoing implementation costs (\$3.5M), the Authority's previous estimates in implementing its previously proposed changes was \$44.5M. When sensitivities to key assumptions that the Authority has not considered are included, the net benefits would be lower.	Trustpower
813 A wider range of costs and benefits must be taken into account for the CBA, including distributional impacts.	Castalia for Genesis
814 The Authority has not taken into account functionless rents in the CBA, which could exceed the estimated efficiency benefit.	Powerco
815 The CBA does not take into account a significant risk of significant costs as a result of the PDP.	HoustonKemp for Trustpower
816 The CBA does not take into account constraints in relation to hydro plants.	Axiom for Transpower, EA Networks
817 The CBA does not take into account the regulatory uncertainty and effect of this on investment in the existing TPM. Based on reasoning contained in this submission, the present value could be \$50.24M.	NERA for Meridian
818 The CBA fails to adequately take into account the (sizeable) wealth transfers and/or the flow-on economic effects of wealth transfers, for example, reductions in demand as a result of the large transfer to load.	Auckland Airport, Axiom for Transpower, EA Networks, ENA, HoustonKemp for Trustpower, KiwiRail, Powerco, Winstone Pulp
819 The CBA fails to take into account the full cost of generation entry, including by excluding cost categories such as fuel costs.	HoustonKemp for Trustpower, Trustpower
820 The CBA identifies \$93M for more efficient co-investment in generation and transmission services. There is evidence to show that the proposal is unlikely to lead to more efficient co-investment, which would reduce the benefit under the CBA.	Pioneer

Costs and benefits

	Submission	Submitter(s)
821	The CBA is likely to have underestimated benefits in certain areas, particularly the benefits flowing from durability as a result in a reduction in investor uncertainty. Reducing investor uncertainty is particularly beneficial given the long life of generation and load assets. Uncertainty arises from the possibility that there may be an HVDC charge in the future, in relation to which the HVDC asset continues to be treated in a discriminatory way. The social cost of regulatory uncertainty in terms of deferred investment is approximately \$50M net present value.	Meridian
822	The CBA over-estimates the cost of continuing to operate the existing fleet of distributed generation.	HoustonKemp for Trustpower
823	The CBA's assessment of more efficient co-investment in generation and transmission services is appropriate.	NERA for Meridian
824	The CBA's assessment of the PDP is related to the hypothetical PDP arrangement with a single transmission customer, not others. It also fails to consider the inefficiencies that could arise as a result of a PDP. There is also a lot of uncertainty about whether a PDP would create benefits at all, for example, in relation to the wholesale electricity market. Removing the PDP from the CBA would reduce the benefits by \$10M.	Pioneer
825	The CBA underestimates the upfront and/or implementation costs of the proposed TPM. Submitters identified that these costs were likely to be higher for the identification of benefits, dispute costs, the PDP, optimisation, and disputes.	Buller Electricity
826	The CBA underestimates the upfront and/or implementation costs of the proposed TPM. Submitters identified that these costs were likely to be higher for the identification of benefits, dispute costs, the PDP and optimisation.	Trustpower
827	The CBA underestimates the upfront and/or implementation costs of the proposed TPM. Submitters identified that those costs were likely to be higher for the identification of benefits, dispute costs, the PDP, optimisation, and disputes.	Castalia for Genesis, EA Networks, HoustonKemp for Trustpower, Pioneer, PwC for 14 EDBs, Trustpower, Unison
828	The potential for large durability costs and investment costs means that the Authority's proposal has not been made out.	Top Energy
829	There is a high risk of adverse impacts in the short to medium term that the Authority has not taken into account. Regardless of the long to medium term benefits once the methodology stabilises, the costs in the short to medium term could be high.	ENA, NZ Steel, PwC for 14 EDBs

Quantification

	Submission	Submitter(s)
830	Agree with the Authority that the unquantified benefits of the proposal are likely to be very substantial, and that those benefits can be given weight even if they are not quantifiable.	Meridian
831	A quantified cost benefit analysis should be used where possible.	Transpower
832	A stronger quantitative CBA will be needed at a some stage (see for example Telecom v Commerce Commission [1992] 3 NZLR 429 at 447). A quantitative CBA should consider issues such as the wholesale market efficiency impacts of the AoB charge in terms of the location of new generation, and the quantification of efficiency losses in benefits.	Business NZ

Quantification

Submission	Submitter(s)
833 Electricity Ashburton has suggested that the TPM modelling exaggerates the extent to which it underpaid in the current TPM period. If the numbers do not stack up, the proposal should not proceed.	Federated Farmers
834 The Authority has claimed additional unquantified benefits. It is more likely that costs will arise in relation to those matters (eg, cost of under-signalling the benefits from investments, and dispute costs).	Axiom for Transpower, HoustonKemp for Trustpower, Powerco
835 The CBA does not include the quantification of the benefits of increased scrutiny of grid investments. Agree with the Authority's view that the benefits could be even larger than Oakley Greenwood's range of \$19.9M to \$66M.	NERA for Meridian

Long-run marginal cost

Submission	Submitter(s)
836 Actual load LRMCS should be higher than the adjusted load LRMCS used by Oakley Greenwood. This would reduce the total net benefits from \$213M to \$67M, or from \$213M to -\$372M.	Pioneer
837 It is not appropriate to use a 60/40 split of long-run major capex between load and generation. If an 80% load 20% generation split was used (which reflects the Authority's separate assessment of historical transmission investment), the total net benefits in the CBA would reduce to \$67M.	Pioneer
838 Oakley Greenwood has adjusted the raw estimated LRMC down by 40% to take into account advice from the Authority that investments are based on changing patterns of demand. The 40% adjustment aligns the estimates with Australia. However, there is no explanation as to why it would be appropriate to align estimates with Australia. Without the adjustment, the net benefits would drop \$585.6M on the single assumption.	HoustonKemp for Trustpower, Pioneer
839 The CBA assumes that generation would be built based on system-wide LRMC. This does not represent the way new entry decisions are made in practice. For example, the approach assumes it will always be more efficient to build a peaking unit.	Axiom for Transpower
840 The CBA assumes that generation would be built based on system-wide LRMC. This is not accurate as a \$/MWh basis should be used. In practice, it is a balance of energy and capacity costs that are likely to determine the order of generation.	HoustonKemp for Trustpower
841 The CBA has errors in the treatment of LRMC.	Powerco

Peak-based signals/RCPD charge

Submission	Submitter(s)
842 Correcting errors in relation to RCPD and peak demand would reduce the benefits in relation to the RCPD charge by \$8M.	Pioneer

Peak-based signals/RCPD charge

Submission	Submitter(s)
843 It is likely that Oakley Greenwood has under-estimated the benefit of eliminating the RCPD charge. That is because the forward-looking costs of existing distributed generation should not be considered a function of ACOT, there is some conflation of forward-looking and sunk costs in the CBA, the CBA ignores all costs of existing distributed generation, and the CBA erroneously assumes that Transpower would have to build 955 MWh of generation capacity under the factual, being the figure matching the existing distributor generation capacity. Transpower would not have to build that capacity as it is already built. The effect of this would be increasing the net benefit of eliminating the RCPD charge from about 90M to about 108M.	NERA for Meridian
844 The "historical" values for RCPD in the CBA are wrong. This has been pointed out to the Authority previously but has not been corrected.	Orion
845 The \$93M of benefit that results from the ending of inefficient demand response associated with RCPD depends on the cost of the demand response: if the cost is low, then the benefit from stopping doing it will likewise be low. This cost is likely to be low if either the incremental cost of the response is quite low (which it is with a service level based peak load control of hot water cylinders) or the response would have occurred in whole or in part even with RCPD (which it might well in response to distribution network pricing signals).	Orion
846 The Authority claims that \$90M NPV of benefit will come from removing the RCPD signal from the interconnection charge for sunk costs. However, this is a transfer with no net benefit.	ENA
847 The Authority's assumption that variabilised charges will defer the need for future transmission capacity is flawed because transmission investment requirements are driven by peak demand, not variable usage. The AoB charge is unlikely to be passed through by retailers, and distributors' transmission charges are passed through to consumers so non-community or trust owned distributors have muted incentives to avoid charges.	PwC for 14 EDBs
848 The CBA does not take into account the impact of existing demand response programmes on the basis that such programmes would continue to operate in response to the cost-reflective AoB charge. However, it is unlikely that demand response would respond to the AoB charge as the price signal is too weak. Accordingly, the CBA should be reduced by \$103M to include a conservative assumption of 700MW of existing demand response.	Pioneer
849 The CBA fails to assess current demand response to peak-based signals and/or inefficiencies that would arise if a peak-based charge was removed (eg, bringing forward investments). For example, some submitters identified that the AMD modelling was not adjusted for changes in demand that would have occurred if there was no RCPD signal.	NERA for Meridian, Network Waitaki, Norske Skog, NZ Steel, NZIER for MEUG, Pioneer, PwC for 14 EDBs, Trustpower, Unison
850 The CBA has substantial errors (eg, that removing a peak-based charge will increase peak-based signals).	ENA
851 The CBA indicates that there are positive economic benefits of retaining an RCPD-based charge.	Trustpower
852 The CBA is not robust. It fails to take into account the fact that LRMC and RCPD elements may need to be incorporated in the future at cost.	NZ Steel
853 The CBA uses the Upper North Island RCPD price signal as the price signal across New Zealand. This is incorrect.	HoustonKemp for Trustpower, Pioneer
854 The historical RCPD input data differs significantly from available Transpower RCPD data on the basis that peak demand is more appropriate. However, peak demand is not a more appropriate basis than coincident peak demand as the underlying driver of investment.	Pioneer

Peak-based signals/RCPD charge

Submission	Submitter(s)
855 There is enough uncertainty in the risk of removing a peak-based charge to invoke the tie-breaker principles of the Code.	Pioneer

Other

Submission	Submitter(s)
856 Oakley Greenwood's CBA is separate from Concept's AoB forecasting, which makes it difficult to evaluate the impact of the proposed TPM.	Pioneer
857 Support MEUG's submission that the CBA undertaken may not be robust.	Fonterra
858 The Authority's modelling for the removal of the HVDC link is appropriate.	NERA for Meridian
859 The benefits (if any) identified under the CBA are not restricted to the AoB charge and could be established through much less radical changes, for example by increasing the number of peak period.	HoustonKemp for Trustpower
860 The benefits of the Authority's proposals do not outweigh the cost.	Northland Inc
861 The CBA identifies a \$106.5M benefit from sending efficient price signals to new generation. The Electricity Commission's estimate in 2010 was \$14M. The extent of the discrepancy indicates that the CBA is not robust.	HoustonKemp for Trustpower
862 The CBA is not robust. The net present value is likely to be much less than the \$200 million estimated.	MEUG
863 The CBA takes into account two independent and mutually exclusive benefits from changes to the same generation schedule. Removing the SIMI benefit would reduce the benefits by \$14M.	Pioneer
864 The level of uncertainty in the CBA could mean that the case for the Authority's proposal has not been made out. Some parties submitted that this was particularly the case given the relatively small net benefit identified in the CBA.	Buller Electricity, Business NZ, Castalia for Genesis, Counties Power, ETNZ, Network Waitaki, NZ Energy, NZ Steel, Orion, Pioneer, Powerco, Top Energy
865 The risks of change substantially outweigh the purported benefits.	TECT
866 When taken together, the individual changes to the net benefits from Pioneer's comments are in the range of -\$262M to -\$2.16B or greater. This is more than sufficient evidence to conclude that the CBA is not robust, accurate and impartial.	Pioneer

Complexity

Submission	Submitter(s)
867 A complex TPM will increase transmission costs.	Auckland Airport
868 It is good that the Authority has simplified its proposals as compared to previous proposals.	Genesis Energy, Mighty River Power, Refining NZ, TNT2, Transpower
869 Some of the complexities in the proposed TPM may undermine the durability of the TPM.	Marlborough Lines
870 The Authority should continue to simplify its proposals in future iterations of the proposal.	Genesis Energy, Pioneer
871 The Authority's proposal is complex and uncertain. This leads to confusion for participants.	Top Energy
872 The Authority's proposals are still very complex and may not be workable.	Transpower
873 The combination of design options are too complex. The Authority should simplify the proposal and eliminate "non-core" design options.	Winstone Pulp
874 The complexity of the working paper is procedurally unfair to small parties, who do not have the resources to understand the proposals.	NZ Energy
875 The TPM should be as straightforward as possible, so it is not desirable to introduce additional components unless it is very clear they are required.	PwC for 14 EDBs

Durability of options

Submission	Submitter(s)
876 In order to promote durability, wealth transfers must be proportionate to efficiency gain. It is not durable for wealth transfers to be much larger than estimated efficiency gains.	Transpower
877 In relation to the HVDC link, it is not durable for \$590M of wealth transfers to be made for a small (\$13.7M) efficiency benefit.	Vector
878 Some submitters have indicated that the Authority's proposals are too complex and will, therefore, not be durable. Complexity doesn't mean durability, as simplicity is not the only or main consideration. The more important consideration is whether the methodology services the need of a competitive market. The Authority's proposals are more consistent with competitive markets, so are more durable than the present arrangements.	Stephen Littlechild for Meridian
879 The Authority has indicated that durability would require totally fixed charges. Previously, the Authority said that durability would involve charges every half hour. This indicates that the Authority's foundational reasoning is poor.	NZ Steel
880 The Authority's proposals will result in disputes and controversy, and harm durability, in particular in relation to the PDP, the identification of benefits in the AoB charge, the prudent discount policy, the marginal benefit adjustment mechanism, and asset optimisation.	EA Networks
881 The implementation of the TPM is likely to lead to disputes and complicated commercial negotiations.	Pioneer
882 The proposal could be made durable by making changes that would be perceived as broadly reasonable and fair. This could be promoted by including as much of the grid as possible in the AoB charge, and using replacement cost rather than depreciated historical cost.	Transpower
883 The proposal is likely to be more contentious than the status quo. For example, additional costs and disruptions could arise in relation to the identification of benefits for the purposes of the AoB charge, the marginal benefit assessment mechanism, the broadening of the prudent discount policy, and optimisation.	Axiom for Transpower
884 The proposal may not be durable to changes in technology.	ENA
885 The proposed TPM is likely to give rise to new areas of disputes in relation to the calculation of benefits. It is unlikely that the proposed TPM would result in a reduction in disputes.	HoustonKemp for Trustpower
886 There may be political risks in a regime designed to trigger ongoing price shocks in various regions. This may have a negative impact on durability.	Trustpower

Distribution pricing and the TPM

Submission	Submitter(s)
887 It is questionable as to whether Transpower can pass through to an EDB the full cost of service. If the Authority determines the level of Transpower pass-through costs to EDBs, staged repayment would be good, and would benefit consumers of smaller EDBs.	Waitaki Power Trust
888 It would be helpful if distributors charged their customers on capacity not volume. Capacity is undesirable because it would make the AoB charge essentially the same as the residual charge.	Top Energy
889 Problems with AoB price signals will be magnified once they are passed on by distributors. The Authority is relying on distributors to establish forward-looking prices when it is not willing to implement them at the transmission level.	CEC for Trustpower
890 The Authority has taken an inconsistent approach for distribution pricing and the TPM review, by focusing on emerging technology for the distribution pricing review, but not the TPM review, promoting variable charges for the TPM review, but recommending peak-based charges for distributing pricing, and focusing on tariffs for the distribution pricing review but focusing on costs for the TPM review. The inconsistent approach could lead to over investment in alternative technology, and ultimately higher distribution prices.	Powerco
891 The Authority has taken an inconsistent approach for distribution pricing and the TPM review, by promoting variable charges in the TPM review, but recommending peak-based charges for distribution pricing.	ENA, Entrust, Network Waitaki, Powerco, PwC for 14 EDBs, Top Energy, Vector
892 The Authority has taken an inconsistent approach for distribution pricing and the TPM review. In relation to distribution pricing, the Authority has made trade-offs depending on networks, customer groups, and location, but transmission charges have been determined on the basis of efficiency.	ENA
893 The Authority has taken an inconsistent approach for distribution pricing and the TPM review. The Authority is requiring distributors to move to service-based charging, but the TPM residual charge is as unavoidable as possible.	Unison
894 The Authority needs to take care not to treat distributors the same as load for the purposes of TPM charges. Distributors do not see nodal price signals. They need to plan before spot prices occur, and it is distribution pricing, not the transmission pricing that incentivises consumer behaviour.	Orion
895 The Authority should ensure that the TPM and distribution pricing take the same approach, in particular in the recovery of common costs. The approach taken for the low fixed charge tariff and the approach taken for the residual are currently inconsistent.	Contact Energy

Pricing effects

Submission	Submitter(s)
896 As Ngawha generation is ramped up, Northland would become a new exporter of generation into the grid, yet still pay more in transmission charges because of its distance from other generation sources. This is a perverse pricing outcome.	EMA
897 Considering wealth transfers would be consistent with the Commerce Commission's approach, upheld by the Court of Appeal in Powerco v Commerce Commission. At the least, the Authority should include measures in the TPM to mitigate wealth transfers.	Auckland Airport
898 In relation to the HVDC link, it is not appropriate/durable to have a large (estimated by some parties at \$500M to \$750M) wealth transfer for a \$13M efficiency benefit. The wealth transfer would have flow on inefficiencies that could swamp the efficiency gain.	Axiom for Transpower, ENA, Entrust, NZIER for MEUG, Unison , Vector, Winstone Pulp
899 In relation to the HVDC link, it is not appropriate to have a \$750 million wealth transfer for a \$13M efficiency benefit.	Entrust
900 In relation to the HVDC link, it is not in the long-term interest of consumers for a large wealth transfer to be made for a small efficiency benefit.	Unison
901 Support the Authority's proposal if it results in cheaper electricity for consumers in Southland, who face a colder climate, old housing stock, and restrictions on the use of fireplaces.	Belinda Ballantine
902 The Authority has underestimated the yearly cost to consumers, which will be closer to \$97 for residential consumers, \$148 for businesses, \$1,577 for schools, and \$22,000 for large users.	411 Entrust submitters, Entrust
903 The Authority's proposal will lead to businesses in some regions paying more in transmission charges, which will lead to businesses struggling. Some businesses are likely to experience a rate shock.	Alpine Energy
904 The Authority's proposal would result in substantial pricing impacts. Accordingly, the Authority should carry out the same price impact analysis as the DGPP consultation, for transparency purposes.	Transpower
905 The current TPM creates cross-subsidies between regions. This harms economic growth in some regions.	PowerNet
906 The current TPM has led to businesses (including large users) in some regions paying too much in transmission charges. This is a competitive disadvantage to those businesses, particularly where they are large employers and/or exporters.	Sarah Dowie, Southland Manufacturers Trust
907 The current TPM has led to consumers in some regions paying too much in transmission charges. This has led to hardship, especially to lower-income people, families, and the elderly.	Grey Power Southland, Sarah Dowie
908 The current TPM has led to consumers in some regions paying too much in transmission charges. This has led to hardship, especially to lower-income people, families, and the elderly. This is particularly true in regions where alternative options (for example, reticulated natural gas) are less available, leaving consumers with fewer alternatives to paying transmission charges.	Liz Craig
909 The current TPM results in businesses in some regions paying too much in transmission charges. This is a competitive disadvantage to those businesses, and leads to negative regional economic effects.	Venture Southland
910 The massive increases in charges appear to sit outside the regulator's mandate to protect the long-term benefit of consumers.	Air Liquide

Submission	Submitter(s)
911 The proposal creates significant wealth transfers, which are not in the long-term interests of consumers.	Vector
912 The proposal may result in wealth transfers. However, the Authority's approach of focusing on economic efficiency as a result, as opposed to short-term distributional impacts, is correct. The current TPM is not an appropriate starting point to measure wealth transfers.	Meridian
913 The proposals have the potential to increase costs for NZ Steel to the extent that it could lead to the closure of some of NZ Steel's operations.	NZ Steel
914 The proposals will increase prices by \$22,000 per year for large electricity users.	Newmarket Inc, Onehunga Business Association, South Harbour Business Association
915 The proposals will increase prices by \$97 per year for residential Auckland consumers (not the \$58 per year that the Authority suggests).	Pacific Leadership Forum, Vector
916 The proposals will increase prices for medium sized businesses by \$1,500 to \$5,000 per year.	Auckland Heart of the City, Newmarket Inc, Onehunga Business Association, South Harbour Business Association
917 The proposals will lead to businesses in some regions paying more in transmission charges, which will lead to businesses struggling.	Air Liquide, EMA, Fletcher Building, GBC Winstone, Northpower, Ruapehu District Council, YOU Travel
918 The proposals will lead to businesses in some regions paying more in transmission charges, which will lead to negative flow on economic effects for regional economies.	North Tec, Northland Inc, Ruapehu District Council
919 The proposals will lead to consumers in some regions paying more in transmission charges, which will lead to hardship, especially to lower income people, families, and the elderly.	54 consumers via Entrust , Auckland Airport, EMA, Entrust, Molly Melhuish, Pacific Leadership Forum, Refining NZ, Ruapehu District Council
920 The proposals will lead to massive increases in charges for some customers, which appear to sit outside the Authority's mandate to protect the long-term benefit of end-users.	EMA
921 The proposals will lead to some regions paying more in transmission charges (76% for Northland), which will have negative effects on regional economic growth.	Northpower
922 The proposal will lead to businesses in some regions paying more in transmission charges, which will lead to businesses struggling (in particular, farmers in Northland, Auckland, West Coast, and Mid-Canterbury).	Federated Farmers
923 The proposed changes to the TPM will have negative effects on regional economic development, local economies, and the New Zealand economy as a whole.	Counties Power Consumer Trust
924 The proposed option will be unfair to irrigators by increasing their charges. This will have negative flow-on impacts for the economy.	Waitaki Power Trust
925 The proposed residual charge will create price shocks for customers. This is inconsistent with best regulatory practice.	EA Networks
926 The proposed TPM leads to considerable uncertainty in charges for NZ Steel.	NZ Steel
927 The proposed TPM will have a significant financial effect on summer-peaking customers.	Network Waitaki
928 The proposed TPM will incentivise parties to self supply, and will discourage growth outside urban areas.	Counties Power Consumer Trust

Submission	Submitter(s)
929 The TPM proposal would be extremely disadvantageous to EA Networks, which peak in summer, relies on embedded generation, and has a temporary over supply of transformer capacity. The fact that the proposals lead to large and unjustified discrepancies across South Island parties indicates that there is something wrong with the proposed TPM.	EA Networks
930 Top Energy's consumers will face significantly higher charges under the proposal. These charges exceed benefits.	Top Energy
931 Transmission pricing has already increased as a result of major grid upgrades. The Authority's proposal is "double dipping" for the same grid investments.	Northland Inc, Northpower

Specificity of guidelines

Submission	Submitter(s)
932 A principled framework is needed to determine what is included in the guidelines and what is not. The Authority should use the framework proposed by Castalia.	Genesis Energy
933 More detailed (although not too much) guidance should be given to Transpower in the guidelines, including decision-making criteria for Transpower to apply.	ENA
934 The Authority may be acting outside its mandate/statutory objective in producing guidelines that are too prescriptive.	Counties Power, Trustpower, Vector
935 The guidelines are a mixture of too much prescription (for example, in relation to how to measure gross AMD), and too much discretion for Transpower in other places (for example, in relation to whether to apply charges based on an assessment of benefits of each asset).	MEUG, PwC for 14 EDBs, Top Energy, Transpower
936 The guidelines are too prescriptive. It is the Authority's role to set outcomes, objectives, and core principles, and for Transpower to design the TPM.	Business NZ, MEUG, PwC for 14 EDBs, Trustpower, Vector
937 The guidelines are too prescriptive. The Authority has assumed the role of Transpower in identifying a preferred TPM, for example, in specifying a method for allocating unallocated costs.	Trustpower
938 The guidelines give Transpower too much discretion (except in relation to the AoB charge). This may lead to inefficiencies, wealth reduction, and unintended consequences.	ENA
939 The guidelines give Transpower too much discretion, which leaves Transpower open to challenge and lobbying, and will delay the TPM. In addition, it could lead to outcomes that are not objective. For example, there is too much discretion in the AoB, the capacity method for the residual charge, and the assessment criteria for PDP applications.	Unison
940 The guidelines give Transpower too much discretion. The TPM should be as objective and mechanistic as possible to avoid ongoing operational discretion. To the extent possible, assumptions, modelling inputs, thresholds, and detailed mechanisms of the TPM components should be in the TPM itself.	Meridian
941 The guidelines give Transpower too much discretion. This may mean that some of the outcomes and benefits expected by the Authority may not arise.	Winstone Pulp
942 The guidelines give Transpower too much discretion in some areas (ie, PwC's submission identifies 29 areas of discretion for Transpower). This opens Transpower to legal challenge, disputes in the analysis of benefits, and transaction costs.	PwC for 14 EDBs
943 The prudent discount policy contains too much discretion, and the recovery of unallocated operating costs should be left to Transpower.	MEUG
944 There are instances where discretion granted in one place is hampered by more restrictive requirements elsewhere in the guidelines. This could be changed by, for example, not specifying the allocation method for the residual charge (or doing further analysis to demonstrate the options are superior), and specifying that the list of eligible investments is a minimum (allowing Transpower to include additional investments).	Transpower

Submission	Submitter(s)
<p>945 The specificity of the guidelines should be determined according to capability, incentives, and information in relation to Transpower and the Authority. The following should be determined by the Authority (ie, included in the guidelines), because certainty is important: principles underpinning the TPM (eg, when flexibility is required); the categories of charges to be used or considered (eg, AoB charge) the criteria the charges must meet; the costs to which the charges apply; the TPM development process; TPM review requirements; and the process and circumstances for reviewing charges. The following should be determined by Transpower, because flexibility is important: how charges are calculated; how charges recover the revenue requirement; and the mechanism for revisiting charges where identified circumstances are met.</p>	<p>Castalia for Genesis</p>
<p>946 Transpower does not have the incentives to adequately deal with discretion.</p>	<p>ENA</p>
<p>947 Transpower should have more flexibility as to the form of the charge and design details. This would result in a TPM that may be more practicable than that envisaged by the Authority.</p>	<p>Trustpower</p>

Sunk costs

Submission	Submitter(s)
948 Consumer response to charges with past investments can reveal important information. This can led to more efficient investment and locational decisions.	Stephen Littlechild for Meridian
949 For the allocation of sunk costs to be truly durable, it must be accepted by the majority of parties as fair and reasonable.	Marlborough Lines
950 Participants have argued that the high threshold should be met before the TPM is changed, because parties have made decisions based on the current TPM. However, there should be no bias in favour of the status quo. The Authority needs to make decisions based on its statutory objective, not based on effects on parties.	Meridian
951 Parties have made investments based on the regulatory regime, so the TPM should only be changed if there is a clear case for change.	Business NZ, TNT2
952 Parties should expect that market prices and conditions will change, and move towards more competitive markets, including with prices that closely relate to costs and benefits.	Stephen Littlechild for Meridian
953 Parties such as Norske Skog have made sensible commercial choices based on the regulatory regime. There should be regulatory certainty for the investments it has made. This is not "freeloading". It is not durable to change the regulatory system such that large wealth transfers occur.	Norske Skog
954 Sunk costs have been treated inconsistently. Refer to previous submissions by Marlborough Lines.	Marlborough Lines
955 Sunk costs should not be allocated to fewer parties, as this will result in economic distortions, will not improve dynamic efficiency, and will increase transmission prices to individual users.	Vector
956 The allocation of sunk costs should be simple, transparent, and fair in order to promote durability. Large wealth transfers should be minimised as they hinder durability.	Norske Skog
957 The Authority has taken an inconsistent approach to sunk assets, because the proposal treats sunk assets differently depending on whether they were commissioned before or after 2004.	Top Energy
958 The TPM proposal is unfair to distributed generators, who have made major investment decisions based on a completely different set of rules.	Hydroworks
959 The TPM should not reallocate sunk costs, because doing so is not good regulatory practice, is not consistent with market-like outcomes, and would reduce efficiency by deterring risk taking.	Auckland Airport
960 The TPM should not reallocate sunk costs, so as to avoid altering the economics of previous investment decisions.	Refining NZ
961 The TPM should not reallocate sunk costs. Businesses have made significant investments in relation to sunk costs. Changing the charging for sunk costs may result in capital flight, and a significant increase in the cost of capital.	Auckland's Heart of the City , Newmarket Business Association , South Harbour Business Association

Transitional arrangements

Submission	Submitter(s)
962 A transitional arrangement is necessary over a longer period than that proposed. Doing so is consistent with the transition for the move from HAMI to SIMI charges. Transitional arrangements would be low cost and would reduce implementation risk and customer impact (eg, price shocks).	Castalia for Genesis
963 Given that the proposals reallocate sunk costs, a transition period is required to mitigate harmful socio-economic effects of the proposals.	Auckland Airport, Auckland's Heart of the City , Newmarket Business Association , South Harbour Business Association
964 If the Authority goes ahead with the proposal, a transition period is required to mitigate harmful socio-economic costs of the proposal.	EMA
965 Support grandfathering of charges.	Auckland Airport
966 Support the Authority's approach of not "clawing back" any costs that were not charged under the AoB method after the TPM comes into effect, but before a simplified and standard method is phased in.	Meridian
967 The Authority does not discuss whether, as a matter of regulatory practice, it needs to consider transition arrangements for parties which have invested on the basis of the current TPM.	Trustpower
968 The Authority has failed to discuss why it is removing the transitional arrangements (from those consulted on in the TPM options working paper), and no CBA was done in relation to the removal of transitional arrangements.	Trustpower
969 The Authority should follow the Commerce Commission in taking a "wait and see" approach for technology change. For example, a claw-back that requires changes to be spread over time to minimise price shocks may be appropriate.	NZ Steel
970 The Authority should introduce transitional arrangements, instead of expanding the PDP.	Fonterra
971 The Authority should not remove peak-based charges without a transition.	Infratil
972 The Authority should seek the means to provide financial relief to businesses that are "caught out" by the residual charge.	Waitaki Power Trust
973 The guidelines should include a transition period, which will minimise impacts on residential customers, manage implementation risks, align with the distribution generation pricing principles, and be good policy practice. A 5-year gradual transition period would be preferable.	Genesis Energy
974 There are no other examples of grandfathering following regulatory changes in New Zealand, and it would seem inappropriate to do so if investments have been made on the basis of taking advantage of an inefficient pricing mechanism.	NERA for Meridian
975 Transitional provisions are undesirable, because they would result in inefficient prices persisting.	Gore District Council, Invercargill District Council , Southland District Council, Venture Southland

Miscellaneous

Submission	Submitter(s)
976 Agree that there should be rules about how new entrants will pay the AoB and residual charges. New entrants should not be advantaged or disadvantaged relative to incumbents.	Meridian
977 Charges should not compromise parties' reasonable ability to recover a return on capital.	TNT2
978 Consumers should not have to pay for recent, unnecessary grid upgrades.	Counties Power Consumer Trust
979 Do not support the proposed TPM.	Top Energy
980 Generators should pay more in charges. Generators clearly benefit from the grid.	Entrust
981 If the Authority acts inconsistently with government policy (including the national policy statement on renewable energy), the political fallout could lead to major regulatory change (for example, a NZ Power scenario), which would be extremely disruptive.	NZ Energy
982 It is a minimum requirement of regulatory practice to make changes via the smallest intervention possible. The fact that radical changes are proposed in the issues paper does not meet this requirement, and would give rise to distortion and higher administrative costs.	EA Networks
983 It is difficult to forecast the effect of the TPM proposal, which will put pressure on businesses.	Fletcher Building, GBC Winstone, Hydroworks
984 It is imbalanced that distributed generation will contribute to grid and network costs, while grid-connected generation will only contribute to grid costs.	AD Harwood, KCE, Ruapehu District Council
985 Only Transpower's optimised transmission and connection assets should be allocated directly to Transpower's customers. This would eliminate Transpower's incentive to over-invest, and would avoid assets being stranded.	Counties Power
986 Removing the HVDC and RCPD charges will promote competition by removing distortions, allowing participants to compete on a level playing field.	Meridian
987 Some submitters have stated that the proposals could lead to regulatory uncertainty. This is not a good argument, because parties should expect that the Authority would move towards a methodology that is more reflective of a competitive and efficient market.	Stephen Littlechild for Meridian
988 Support the AoB charge and residual charge, because operational decisions will be based on marginal costs, grid users will face the marginal costs of the use of assets through nodal pricing, grid users will face an overall signal for investment and location decisions, the residual will be non-distortionary, and the charges will result in greater scrutiny of new transmission investments.	Meridian
989 Technology exists to allow aluminium smelters to modulate their energy consumption by plus or minus 30%, which could free up power for the grid at times of low generation or peak demand.	Energia Potior
990 The Authority/Commerce Commission should consider what should happen when an investment could cover multiple parties' future demand, but the demand is lumpy or uncertain.	Waitaki Power Trust

Submission	Submitter(s)
991 The Authority has dismissed Ramsey pricing on grounds that are inconsistent because, despite the Authority's concern that Ramsey pricing would lead to higher prices for users with an elastic demand, the Authority's proposal will discriminate against other end users. The Authority has dismissed Ramsey pricing on grounds that are incorrect because Ramsey prices apply to products, not customers. For example, in the TPM context transmission services could be divided into peak and off-peak transmission services, with different mark-ups to each in accordance with Ramsey principles.	CEC for Trustpower
992 The Authority should consider whether the TPM results in efficient pricing signals for distributed generation. The Authority's proposed changes to the TPM will impact on ACOT payments regardless of whether any changes are made to the pricing principles.	Powerco
993 The Authority's proposals will not encourage efficient "just in time" investment. New Zealand historically under-invests in infrastructure, and is still recovering from doing so.	EMA
994 The Code should specify regular mandatory reviews of the TPM, which would provide an opportunity for adjustments to reflect changes in circumstances, and for any disagreements to be managed constructively.	Castalia for Genesis
995 The government should not interfere with the open (electricity) market, as this will backfire and increase costs, making the economy less competitive.	Jesuino Azevedo
996 The guidelines should not refer to "the TPM in force on the date of these guidelines" as that date could be unclear if the guidelines are updated.	Castalia for Genesis
997 The proposals unfairly penalise distributed generation, which is inconsistent with government policy to promote renewable generation.	Hydroworks, Ruapehu District Council, Top Energy
998 The proposals will achieve the Authority's statutory objective and are consistent with the Authority's Code amendment principles.	Meridian
999 The proposals would promote reliable supply as described in the Authority's statutory objective, by providing better incentives for scrutiny of efficient transmission investments.	NERA for Meridian
1000 The proposal will promote competition. It will remove present distortionary signals in the generation market, creating a level playing field, and incentivise a greater number of competitors to remain in the market through the PDP.	Meridian
1001 The proposed changes to the TPM do not account for significant technology changes that may occur in the future eg the grid as a "system battery", virtual grid disconnection, load matching.	NZ Energy
1002 The proposed methodology would be seen by customers as not competitive, ie, favouring the grid that is coming under pressure from photovoltaic distributed generation and other technological advances.	Network Waitaki
1003 There is a lot of implementation details still to be worked out in the TPM.	Nova Energy
1004 The TPM needs to be flexible enough to allow for local generation to be built and transmission charges to be reallocated. For example, when the Ngawha build is complete, Northland's charges should drop.	Northland Mayoral Forum
1005 The TPM needs to tie-in with the Commerce Commission's regime and recognise the role of demand response and nodal pricing.	Castalia for Genesis
1006 Transpower has prepared specific drafting amendments to the proposed TPM that reflect its comments, without compromising the Authority's policy intent (notwithstanding Transpower's preference for a simplified, staged approach).	Transpower

Submission		Submitter(s)
1007	Transpower should be required to "write down" its revenue requirements.	Molly Melhuish
1008	When the new TPM is implemented, the EV account balances should be recovered in accordance with the new TPM.	Meridian