Summary of submissions

Transmission pricing methodology: second issues paper supplementary consultation

Contents

Process

Process: consultation

No.	Submitter	Submissions
1.	Energy Trusts of New Zealand	Because of the inadequacies of the Authority's second issues paper and the supplementary consultation paper, the Authority should publish an amended paper to facilitate informed consultation by the (mainly) residential consumers who will face significant increases in transmission prices.
2.	Covec, Counties Power, Counties Power Consumer Trust, ENA, Entrust, Northern Federated Farmers, Northpower, Top Energy, Trustpower, Vector	For some of the consultations during the TPM review process, parties have faced constraints in their ability to participate, due to other consultation processes running at the same time.
3.	Pacific Aluminium, New Zealand Aluminium Smelter, Business NZ, Canterbury Employers' Chamber of Commerce, Business Central, Venture Southland, Awarua Synergy, Dongwha, EIS, E-Type Engineering, HW Richardson Group, Southland Chamber of Commerce, South Port, Sarah Dowie MP, Southland District Council, Southland Manufacturers Trust, Southland Mayoral Forum, Todd Barclay MP, Invercargill City Council, Gore District Council, Grey Power Southland, Export Southland, University of Otago	It is good that the Authority has listened to submitters.
4.	Trustpower	Do not agree with the Authority's conclusion that the Court in *Trustpower v Electricity Authority* found no fault with the Authority's consultation process. The Court indicated that the process is amenable to review and decided only that it would be premature to intervene at that stage.

No.	Submitter	Submissions
5.	Trustpower	The Authority's consultation process has been inadequate. Proper and meaningful consultation is a legal requirement (for example see *Wellington International Airport Limited v Air New Zealand* and *Diagnostic Medlab Limited v Auckland District Health Board*). Proper and meaningful consultation also improves substantive decision-making. The Authority's consultation has been seriously hampered by: consulting on problems and solutions at the same time; not resolving issues; not providing detailed reasons for matters the Authority considers resolved; releasing information ad hoc during the consultation period; and constraining consultation periods. The use of the "propose-respond" format has also been secretive and unhelpful. As a result, parties may withdraw from engagement in the consultation process and focus on engagement with political processes, which will have an adverse impact.
6.	MEUG, Fonterra, Oji Fibre Solutions, Winstone Pulp International	When the Authority publishes its guidelines, the Authority should set out its expectations to Transpower regarding Transpower's consultation process, and its expectations on distributors to assist Transpower to estimate the effect of the TPM on end consumers.
7.	Counties Power, Counties Power Consumer Trust	Errors in the calculation of the impacts of the proposal indicate that the Authority's consultation process may not be reasonable.
8.	Trustpower	The proposed online Q&A session with OGW will not address issues with the CBA modelling, which are more fundamental in nature than can be addressed via such a forum. The Authority should instead engage a technical advisory group to assist its decision-making on how to proceed in this area.
9.	Trustpower	Parties have not been given sufficient information or time to understand the effects of including the HVDC assets within the AoB charge.
10.	NZ Energy	Smaller stakeholders have been unable to participate in the Authority's consultation process. Small companies lack the resources to understand the Authority's proposals and make comprehensive submissions, particularly given the tight timeframes that the Authority has set for the supplementary consultation. The Authority should have contacted smaller stakeholders to offer assistance in engaging in the consultation process.

No.	Submitter	Submissions
11.	Venture Southland, Awarua Synergy, Dongwha, EIS, E-Type Engineering, HW Richardson Group, Southland Chamber of Commerce, South Port, Sarah Dowie MP, Southland District Council, Southland Manufacturers Trust, Southland Mayoral Forum, Todd Barclay MP, Invercargill City Council, Gore District Council, Grey Power Southland, Export Southland, University of Otago	The Authority has run a good and inclusive consultation process.
12.	Counties Power Consumer Trust	The Authority has run a poor consultation process that has imposed a significant cost burden on users of electricity.
13.	Transpower	The Authority should allow a conference.
14.	ENA, Alpine Energy, Aurora Energy, Buller Electricity, Counties Power[1], Eastland Network, Electra, EA Networks, Horizon Energy Distribution, Mainpower, Marlborough Lines, Nelson Electricity, Network Tasman, Network Waitaki, Northpower, Orion, Powerco, PowerNet, Scan Power, The Lines Company, Top Energy, Vector, Waipa Networks, WEL Networks, Wellington Electricity Lines, Westpower, Unison, Centralines, Transpower	The Authority should allow cross-submissions. Some parties wanted cross-submissions so that they could consider Transpower's submissions.
15.	Genesis Energy, Transpower, Oji Fibre Solutions	The Authority should conduct further consultation on the drafting of the guidelines.
16.	Oji Fibre Solutions	The Authority should establish a working group of industry experts that is representative of the various industry participants, to further consider some of the issues raised throughout the consultation process.
17.	Winstone Pulp International	The Authority should finalise the new TPM guidelines and issue them to Transpower without any further consultation.

[1] ENA's submission states that Counties Power "mostly supports" ENA's submission.

No.	Submitter	Submissions
18.	Energy Trusts of New Zealand	The Authority should more clearly explain the impact of its proposals on transmission charges under different scenarios (for example, by adding a table early in its papers showing the expected annual transmission charges under each scenario, that includes totals). This would facilitate better engagement from consumers and commentators on the Authority's proposals.
19.	Entrust, MediaWorks	The Authority's process (for example, the absence of an industry working group) has prevented the real issues with its proposals from surfacing until the final stages of its consultation process.
20.	Trustpower	The consultation that the Authority must carry out once Transpower submits a new TPM for review is limited. At that stage, it will be too late for substantive changes to be made to the guidelines.
21.	Trustpower	The information released by the Authority on 23 February 2017 (in relation to the modelling for the HVDC charge) is material, because it raises serious questions about whether the HVDC link should be included in the AoB charge. The late release of this material is problematic for the consultation process, because the HVDC charge is one of the most controversial parts of the TPM.
22.	Fonterra, Mercury Energy	The uncertainty regarding how Transpower will implement the proposed guidelines makes it difficult to provide meaningful feedback on the Authority's proposal.

Process: predetermination

No.	Submitter	Submissions
23.	Counties Power Consumer Trust, Northpower	The Authority's failure to place sufficient weight on expert submissions suggests that the Authority has not considered issues with an open mind.

No.	Submitter	Submissions
24.	PwC, Alpine Energy, Aurora Energy, EA Networks, Eastland Network, Electra, Mainpower, Marlborough Lines, Nelson Electricity, Network Tasman, Northpower, The Lines Company, Top Energy, Waipa Networks, Westpower, Counties Power, Counties Power Consumer Trust, Norske Skog	The Authority's mind appears to be largely made up regarding its policy proposals.
25.	Counties Power, Counties Power Consumer Trust	The Authority's modelling errors and protracted consultation process indicate that the Authority does not have an open mind in relation to the TPM reform.
26.	Norske Skog	The fact that, despite the extensive criticism of the Authority's original proposal, the Authority is now proposing tweaks to that proposal, suggests that the Authority has closed off any further discussion about options for the TPM.

Process: treatment of previous submissions

No.	Submitter	Submissions
27.	Grey Power Southland	It has taken time for the Authority to listen to stakeholders in Invercargill and Southland.

No.	Submitter	Submissions
28.	EA Networks, Vector, PwC, Alpine Energy, Aurora Energy, EA Networks, Eastland Network, Electra, Mainpower, Marlborough Lines, Nelson Electricity, Network Tasman, Northpower, The Lines Company, Top Energy, Waipa Networks, Westpower, NZ Steel, Covec, Counties Power, Counties Power Consumer Trust, ENA, Northern Federated Farmers, Trustpower, Orion, Entrust, Employers and Manufacturers Association (Northern), Northland Regional Council, Northland Inc, Northland Chamber of Commerce, MediaWorks, Norske Skog, Oji Fibre Solutions, Pioneer Energy, Otago Chamber of Commerce	The Authority has failed to address criticisms of its proposal identified in submissions/expert reports. Particular matters raised for the Authority's specific response included: Why LRMC was not adopted as a core charge given its higher ranking than AoB on the DME; why the Authority is applying the AoB to existing assets despite this not promoting efficiency; the effect of economic sizing principles; the negative effects of removing a peak demand signal; problems with the CBA; inconsistencies with the Government's policy to reduce energy use and energy costs; that the unavoidability of costs dilutes competition; that nodal pricing fails to signal long-term costs and security of supply risks; and that the Authority has presented insufficient evidence for its proposals.
29.	Axiom for Transpower	The Authority has made only a token attempt to address issues in relation to the shortcomings of the AoB price signal.
30.	Transpower, Genesis Energy	The Authority has not adequately engaged with Transpower's simplified staged approach proposal.
31.	Trustpower, Employers and Manufacturers Association (Northern)	The Authority should have released detailed responses to submissions.
32.	Northpower	The Authority's reasons paper should provide full responses to submitters.
33.	Covec, Counties Power, Counties Power Consumer Trust, ENA, Entrust, Northern Federated Farmers, Northpower, Top Energy, Trustpower, Vector	While the volume of criticism is not determinative, the Authority is obliged to consider evidence in its decision-making. The fact that the Authority has not cited particular experts/critics suggests that the Authority is not engaging with the expert submissions.

Process: Authority's policy process

No.	Submitter	Submissions
34.	Business NZ, Canterbury Employers' Chamber of Commerce, Business Central	It is important that the Authority is able to convince a hypothetical disinterested but fair-minded observer that its proposals will promote efficiency, and does not merely tell stakeholders that the Authority's proposals are in those stakeholders' long-term interests.
35.	Entrust, Employers and Manufacturers Association (Northern), MediaWorks, Northern Federated Farmers, Counties Power Consumer Trust, Northpower, Auckland Chamber of Commerce	The Authority has not complied with its obligations under the Electricity Industry Act to evaluate alternatives thoroughly.
36.	Nova	The Authority appears to have changed its focus from introducing a market-like pricing structure, to ensuring that no entity can avoid paying for the grid (even if they can economically bypass the grid).
37.	ENA, Alpine Energy, Aurora Energy, Buller Electricity, Counties Power, Eastland Network, Electra, EA Networks, Horizon Energy Distribution, Mainpower, Marlborough Lines, Nelson Electricity, Network Tasman, Network Waitaki, Northpower, Orion, Powerco, PowerNet, Scan Power, The Lines Company, Top Energy, Unison, Vector, Waipa Networks, WEL Networks, Wellington Electricity Lines, Westpower	The Authority has changed its approach from a prescriptive response to perceived problems in the context of the Authority's DME framework, to an approach that makes trade-offs between different objectives. The Authority and Transpower need to make these trade-offs clear.
38.	Covec, Counties Power, Counties Power Consumer Trust, ENA, Entrust, Northern Federated Farmers, Northpower, Top Energy, Trustpower, Vector	The Authority has gone back and forth on policy proposals, indicating an ad-hoc policy process.
39.	EA Networks, Axiom for Transpower	The Authority has unrealistically assumed that its proposal would work perfectly, but that other options would entail numerous shortcomings.

No.	Submitter	Submissions
40.	Vector, Entrust	The Authority has used flawed reasoning. For example, the logical conclusion of the Authority's position that recent investments constitute a material change in circumstances is that the TPM provides insufficient signals to reduce demand. This is inconsistent with the Authority's conclusion that the interconnection (RCPD) charge provides too strong signals to curb demand.
41.	Pacific Aluminium, New Zealand Aluminium Smelter	The Authority should give greater consideration to the holistic effects of the TPM, as opposed to merely assessing the standalone efficiency of individual elements.
42.	Otago Southland Employers' Association, Port Otago, Queenstown Lakes District Council, Southland Manufacturers Trust, Dunedin City Council, Clutha District Council, PowerNet	The Authority should not be swayed by submissions opposing change that are not supported by facts/evidence or that are misleading, and should ensure that its proposals are consistent with the principles of cost-reflective and service-based pricing.
43.	Northland Inc, Auckland Chamber of Commerce	The Authority should take into account a wider range of socioeconomic factors in making decision about the TPM (for example, submitters identified strategic national and regional economic development efforts and price increases in other sectors).
44.	Counties Power Consumer Trust	The major changes that the Authority has made to its proposals throughout its process have created uncertainty as to what the Authority's final position will be.

Process: material change in circumstances / basis for review of TPM

No.	Submitter	Submissions
45.	Trustpower	The Authority has derived its review from concerns about the extent to which the current TPM complies with the Authority's interpretation of its statutory objective. The Authority has not found any fault with the extent to which the TPM complies with the current TPM guidelines or the Commerce Commission's determinations under Part 4 of the Commerce Act.
46.	Transpower	The Authority's 2012 assessment of the material change in circumstances is likely to be out of date. Changes in technology constitute a potential material change in circumstances.

No.	Submitter	Submissions
47.	Trustpower	There has been no material change in circumstances to warrant the Authority's current TPM review. See Trustpower's previous submissions on this point.

Process: Authority's interpretation of its statutory objective

No.	Submitter	Submissions
48.	Trustpower, Professor Yarrow for Trustpower	The Authority's focus in interpreting its statutory objective should be on promoting competition. The legislative framework relies on the Commerce Commission to ensure that regulated electricity companies have incentives to innovate and invest. The legislative framework assumes that, if the Code is directed at the promotion of competition, industry participants will have those incentives to innovate and invest. Competition is in the long-term interests of consumers through information discovery. Promoting overall efficiency is speculative, a vast and unfeasible task, and does not consider distributional impacts (a matter almost invariably considered in policy decisions).
49.	Trustpower, Professor Yarrow for Trustpower	The Authority's objective of promoting "efficient operation of the industry" has a narrower meaning than determined by the Authority, as it is primarily about accounting efficiency (for example, poor asset maintenance) not economic efficiency. The Authority is overreaching its mandate in relation to its interpretation of that limb of its statutory objective.
50.	Trustpower	The Authority's statutory objective requires it to consider each limb of the statutory objective separately. In contrast with the Commerce Commission, the Authority is not required to make or administer the Code in order to promote efficient investment or to replicate market outcomes. The Authority has underweighted its mandatory considerations by interpreting the statutory objective, through the DME framework, to mean overall efficiencies. This has resulted in the Authority: applying the wrong criteria in conducting its review of the TPM; incorrectly dismissing the status quo; discarding options that would meet the statutory objective; and potentially approving an option that reflects a regulatory objective not intended by the legislative framework.

No.	Submitter	Submissions
51.	Trustpower, Professor Yarrow for Trustpower	The Authority's statutory objective requires it to consider distributional impacts, because of the words "for the long-term benefit of consumers". The Authority is a regulator, and as such has policy objectives that are wider than economic efficiency. Considering distributional impacts would also be consistent with the *Powerco* decisions. For example, the Authority's decision to remove the HVDC charge (net benefit $13.7 million), but increasing charges by $625.9 million for North Island mass-market customers would have been ruled out under a correct application of the Authority's statutory objective, because it has significant adverse distributional effects without proportionate offsetting efficiency gains.
52.	IEGA, Pioneer Energy, NZ Energy, Otago Chamber of Commerce	The Authority has ignored wealth transfers in the TPM proposal, but promoted the TPM and DGPP decisions by claiming major savings for some end-users. The Authority should consider the dynamic efficiency effects of a loss of confidence as a result of wealth transfers. This is consistent with the Authority's interpretation of its statutory objective, which allows for wealth transfers to be taken into account if they would seriously undermine confidence in the pricing process. It is misleading for the Authority to claim lower charges for some customers when the estimates are "indicative" only and may not be realised.

Process: Transpower's process

No.	Submitter	Submissions
53.	Auckland Airport	Support the use of an industry group to assist Transpower in designing and implementing a new TPM.
54.	Business NZ, Canterbury Employers' Chamber of Commerce, Business Central	Due to the flexibility given to Transpower in designing the TPM, there should be transparency in, and consultation on, the process that Transpower follows.
55.	Covec, Counties Power, Counties Power Consumer Trust, ENA, Entrust, Northern Federated Farmers, Northpower, Top Energy, Trustpower, Vector	Expert submissions criticise the Authority's DME framework, and the Authority's application of the DME framework.

No.	Submitter	Submissions
56.	Contact Energy	To help avoid further delays in implementing the new TPM guidelines, the Authority should consider a staged approach under which Transpower first implements the core components of the new TPM guidelines, and then assesses the need for additional components.
57.	Transpower	Transpower is unlikely to be able to implement a systems-based TPM until mid-2021, resulting in prices coming into effect in 2022 at the earliest. A transitional, non-systems-based implementation may be feasible from 2020. Details regarding the implementation path are included in the submission.
58.	Trustpower	The Authority's proposed process for Transpower's development of the TPM is sparse and not fit for purpose.

Process: other

No.	Submitter	Submissions
59.	MEUG, Fonterra, Oji Fibre Solutions, Winstone Pulp International	A much more robust CBA will be required when the Authority consults on the proposed TPM under clause 12.92 of the Code.
60.	Castalia for Genesis, Oji Fibre Solutions	A timeframe of 90 days to develop a TPM is not realistic for Transpower, especially given the complexity of the guidelines.
61.	Auckland Chamber of Commerce	It is concerning that the industry still has not reached a consensus on the Authority's proposals.
62.	Trustpower, Bushnell/Wolak for Trustpower	The Authority's TPM process jeopardises the rule of law and regulatory certainty. Parties will view regulatory changes as "opportunistic", which will make it more difficult to attract new investment.
63.	Trustpower	The Authority's view that it is not bound by the steps in the Code in relation to the TPM review process, but is following them anyway, creates significant uncertainty for parties about whether the Authority will follow the process in relation to a future review. The Authority's interpretation is not consistent with section 32(2)(a) of the Electricity Industry Act.

No.	Submitter	Submissions
64.	Trustpower	The Code allows discretion on the extent to which guidelines are produced (see clause 12.83 of the Code). If no guidelines are in place, Transpower could still develop a TPM, provided that there is the required published process for the development of the TPM.
65.	Trustpower	The process for developing and publishing TPM guidelines under the Electricity Industry Act (which includes the publication of an issues paper) only applies to the inaugural TPM and associated TPM guidelines, not to replacing the TPM guidelines. In *Contact Energy v Electricity Commission*, the High Court found that, once published, the TPM guidelines are fixed and final unless the regulatory framework is changed to allow for their review and replacement. This would require the removal of clause 17.118 of the Code and its replacement with an entirely new process. Such changes to the Code would need to follow the Code change process in the Act. The Authority's view that it can change the TPM guidelines without following the Code change process in the Act is astounding, and is inconsistent with cases such as *Fitzgerald v Muldoon* and *Contact Energy v Electricity Commission*.
66.	Meridian Energy	The Authority needs to be wary that it does not sub-delegate its powers to Transpower (for example, in relation to the scope of the AoB charge).
67.	Venture Southland, Awarua Synergy, Dongwha, EIS, E-Type Engineering, HW Richardson Group, Southland Chamber of Commerce, South Port, Sarah Dowie MP, Southland District Council, Southland Manufacturers Trust, Southland Mayoral Forum, Todd Barclay MP, Invercargill City Council, Gore District Council, Grey Power Southland, Export Southland	Support the Authority's TPM review process. The amount of time it has taken to reform the TPM guidelines reflects the exhaustive nature of the process, and the entrenched interests opposed to reform.
68.	Canterbury Employers' Chamber of Commerce	The Authority needs to conduct some further work before finalising its proposals, but the need to carry out that work needs to be balanced against the need to remove the subsidy that South Island regions pay to other regions as soon as possible.

No.	Submitter	Submissions
69.	Entrust, Employers and Manufacturers Association (Northern), Auckland Chamber of Commerce	The Authority should abandon its current process, and re-establish an industry working group. Any further consideration of the TPM guidelines must: be based on an agreed problem definition that is widely accepted by industry stakeholders; include a full and transparent analysis of alternatives and CBAs of each alternative that are based on modelling inputs that are agreed by industry stakeholders; include full engagement with the industry working group throughout the process; and include industry input into the timing and implementation of any agreed new alternative.
70.	Northland Regional Council, Northland Inc, Northland Chamber of Commerce	The Authority should abandon its proposals, and begin its review again. The Authority should involve the entire electricity industry in that review to find a durable and more equitable solution, and should support its analysis with a robust CBA.
71.	Pioneer Energy, Otago Chamber of Commerce	The Authority should agree with Transpower on specified agreed efficiency outcomes.
72.	Buller Electricity, W Devine, Counties Power Consumer Trust, Unison, Centralines, Pacific Aluminium, New Zealand Aluminium Smelter, PowerNet, ENA, Alpine Energy, Aurora Energy, Counties Power, Eastland Network, Electra, EA Networks, Horizon Energy Distribution, Mainpower, Marlborough Lines, Nelson Electricity, Network Tasman, Network Waitaki, Northpower, Orion, Powerco, Scan Power, The Lines Company, Top Energy, Vector, Waipa Networks, WEL Networks, Wellington Electricity Lines, Westpower	The Authority should bring the TPM review process to a close as soon as possible. Reasons provided by submitters include to end inefficient charges and to promote regulatory certainty.
73.	Entrust, Northpower, Trustpower, Transpower	The Authority should have engaged experts to evaluate its proposals.

No.	Submitter	Submissions
74.	Venture Southland, Awarua Synergy, Dongwha, EIS, E-Type Engineering, HW Richardson Group, Southland Chamber of Commerce, South Port, Sarah Dowie MP, Southland District Council, Southland Manufacturers Trust, Southland Mayoral Forum, Todd Barclay MP, Invercargill City Council, Gore District Council, Grey Power Southland, Export Southland, Otago Southland Employers' Association, Port Otago, Queenstown Lakes District Council, Clutha District Council, PowerNet, University of Otago, Nancy Joll, Jim Fish, Canterbury Employers' Chamber of Commerce, Contact Energy	The Authority should not delay any further work on the TPM guidelines, and should proceed with its proposals as soon as possible.
75.	Canterbury Employers' Chamber of Commerce, Business Central	The Authority should undertake more work to assure all interested stakeholders that its proposals will deliver identifiable improvements and dynamic efficiencies for New Zealand as a whole.
76.	Houston Kemp for Trustpower, CEC for Trustpower, Bushnell/Wolak for Trustpower, Covec, Counties Power, Counties Power Consumer Trust, ENA, Entrust, Northern Federated Farmers, Northpower, Top Energy, Trustpower, Vector	The Authority's adoption of a hierarchy of charging options is misguided and has been inconsistently applied. Covec for 9 parties noted that experts have criticised the Authority's use and application of the DME framework.
77.	Trustpower, Professor Yarrow for Trustpower	The Authority's approach to the TPM review process creates uncertainty about whether the Authority might intervene in the future after further investments have been made. This will interrupt the price signals created by the AoB charge.
78.	Trustpower	The Authority's conclusion that the guidelines needed to be entirely replaced because of inconsistency with section 15 of the Act was made very early in the process. The Authority has continued to update the reasons for its conclusion throughout the last four years.

Area-of-benefit charge (paragraphs 3.2–3.36)

Area of benefit charge: allowance for broader coverage of the charge

No.	Submitter	Submissions
79.	NERA for Meridian Energy	A broader application of the AoB charge may result in charges that are not meaningful, because Transpower may not have information on the historical costs of older transmission assets, and because of the effect of the simplified AoB method.
80.	Trustpower, Bushnell/Wolak for Trustpower, Professor Yarrow for Trustpower, CEC for Trustpower, Houston Kemp for Trustpower, EA Networks, Vector, Entrust	Applying the AoB charge to existing assets will be a wealth transfer without efficiency benefits.
81.	Covec, Counties Power, Counties Power Consumer Trust, ENA, Entrust, Northern Federated Farmers, Northpower, Top Energy, Trustpower, Vector	Applying the AoB to some costs will compromise static efficiency, and would be unrelated to the rationale of improving dynamic efficiency.
82.	Transpower	Bringing more investments into the AoB charge will not solve the problems identified previously with the design of the AoB charge (distortions to the wholesale market and increases in charges in the upper North Island), and may make them worse.
83.	PwC, Alpine Energy, Aurora Energy, EA Networks, Eastland Network, Electra, Mainpower, Marlborough Lines, Nelson Electricity, Network Tasman, Northpower, The Lines Company, Top Energy, Waipa Networks, Westpower	Broadening the AoB charge could have severe consequences for distributors such as Westpower. To mitigate the risk and uncertainty of the proposed refinement, the requirement relating to avoiding charging anomalies and having charges relate to the size of the load (from the residual) should apply to the AoB charge.
84.	NZ Steel, Northpower	Existing assets should not be included as eligible investments.
85.	Pacific Aluminium, New Zealand Aluminium Smelter	Extending the AoB charge should be viewed holistically in the context of the overall TPM (including the valuation method, the approach to the AoB charge, and adjustments to the AoB charge through optimisation).

No.	Submitter	Submissions
86.	Northpower, Vector, Entrust, Counties Power, Counties Power Consumer Trust	Do not support applying the AoB charge to existing assets. However, if the Authority proceeds with its proposals, the AoB charge should apply to all transmission assets.
87.	Trustpower, CEC for Trustpower	Meridian claims that nearly half of OGW's quantified benefits relate to improving the pricing of existing assets. However, these benefits are achieved by fixing charges, not reallocating them.
88.	CEC for Trustpower	Meridian claims that price control measures have been applied to existing and new assets in other industries. However, in those examples, a beneficiaries-pay approach was not applied. The Authority's proposal is different because it seeks to apply charges to some existing assets only.
89.	CEC for Trustpower	Professor Littlechild identifies that retrospective application of AoB will give rise to prices better approximating LRMC than non-retrospective application of AoB. However, for this to occur, charges must be variable so that a price signal actually exists that customers can respond to. Retrospectivity should apply to all existing assets, not just a subset. An AoB approach is still inferior to an actual tilted postage stamp approach.
90.	Trustpower, Bushnell/Wolak for Trustpower	Professor Littlechild justifies the application of AoB charges to eligible investments on the basis that not doing so would be confusing and burdensome. However, it would be more confusing and burdensome to do the opposite.
91.	Trustpower, Professor Yarrow for Trustpower	Professor Littlechild justifies the application of AoB charges to eligible assets on the basis that not doing so would be confusing and burdensome. It is unclear why this would be a big problem, especially because moving to market-like charges will likely give rise to greater price differentiation.
92.	Trustpower, Professor Yarrow for Trustpower	Professor Littlechild justifies the application of AoB charges to existing assets on the basis that it would set an undesirable precedent that earlier established customers of Transpower could expect more favourable terms than later customers. However, this outcome would not be unfair.

No.	Submitter	Submissions
93.	Trustpower, Professor Yarrow for Trustpower	Professor Littlechild justifies the application of AoB charges to selected existing assets on the basis that not doing so would encourage the false belief that regulators cannot or should not make changes across the board. However, there is no particular merit in across the board changes per se, and they can create uncertainty.
94.	Bushnell/Wolak for Trustpower	Professor Littlechild justifies the application of AoB charges to selected existing assets on the basis that doing so can reveal important information. However, this could result in lower usage in regions that already have sufficient infrastructure, and higher usage in areas approaching capacity constraints.
95.	Trustpower, Professor Yarrow for Trustpower	Professor Littlechild justifies the application of AoB charges to selected existing assets on the basis that doing so can reveal important information. However, given that transmission costs are only a fraction of end electricity prices, the information would not be particularly useful.
96.	Auckland Airport	Retrospectively applying the AoB charge to existing assets would undermine certainty/confidence/durability.
97.	Auckland Airport	Retrospectively applying the new TPM guidelines to existing assets would go beyond the Authority's role, and would be inconsistent with good regulatory practice.
98.	Pacific Aluminium, New Zealand Aluminium Smelter	Support the proposed refinement, because it would be cost-reflective and service-based, and would reduce the distortionary effects of a large residual.
99.	Transpower	Support the proposed refinement, as it would result in the TPM being: more cost-reflective and service-based; more consistent across grid assets and investments; and simpler to administer and implement.
100.	Top Energy, Ngawha Generation	Support the proposed refinement, but if the AoB charge is to be applied respectively (which Top Energy does not support), the 2004 and $50 million cut-off limits should not apply.
101.	Fonterra, Contact Energy, Oji Fibre Solutions, Pacific Aluminium, New Zealand Aluminium Smelter, Transpower, Top Energy, Ngawha Generation, Business NZ, Canterbury Employers' Chamber of Commerce, Business Central	Support the proposed refinement/support broader application of the AoB charge.

No.	Submitter	Submissions
102.	Axiom for Transpower	The application of the AoB charge to existing investments would not improve allocative efficiency, because: the cessation of inefficient load shedding would be due to the removal of the RCPD charge, not the introduction of the AoB charge; SIMI has addressed inefficiencies arising from the HAMI-based charge; the charge could result in a reduction in demand, giving rise to an allocative efficiency loss; and the AoB charge could result in distortions to generator offers, compromising the efficiency of the wholesale dispatch process.
103.	Counties Power, Counties Power Consumer Trust	Including some historical assets in the AoB charge and not others would not reflect benefits. Removing historical assets from the AoB charge would also improve the simplicity and durability of the proposal.
104.	Houston Kemp for Trustpower, Covec, Counties Power, Counties Power Consumer Trust, Northern Federated Farmers, Trustpower, Auckland Airport, Axiom for Trustpower, Trustpower, CEC for Trustpower, Bushnell/Wolak for Trustpower, Professor Yarrow for Trustpower, Vector, Entrust, ENA, Alpine Energy, Aurora Energy, Buller Electricity, Eastland Network, Electra, EA Networks, Horizon Energy Distribution, Mainpower, Marlborough Lines, Nelson Electricity, Network Tasman, Network Waitaki, Northpower, Orion, Powerco, PowerNet, Scan Power, The Lines Company, Top Energy, Unison, Vector, Waipa Networks, WEL Networks, Wellington Electricity Lines, Westpower	The AoB charge should not apply to existing assets, as doing so would not promote efficiency.

No.	Submitter	Submissions
105.	Meridian Energy, NERA for Meridian Energy	The AoB charge should not be extended to further existing assets. In order to extend the coverage of the AoB charge, Transpower would be required to develop a methodology to assign costs, which would be contentious, difficult, not service-based, would undermine durability, and would distort the AoB pricing signal.
106.	Awarua Synergy, Dongwha, EIS, E-Type Engineering, HW Richardson Group, Southland Chamber of Commerce, South Port, Sarah Dowie MP, Southland District Council, Southland Manufacturers Trust, Southland Mayoral Forum, Todd Barclay MP, Invercargill City Council, Gore District Council, Grey Power Southland, Export Southland, Otago Southland Employers' Association, Port Otago, Queenstown Lakes District Council, Dunedin City Council, Clutha District Council, Business NZ, Canterbury Employers' Chamber of Commerce, Business Central, ENA, Alpine Energy, Aurora Energy, Buller Electricity, Counties Power, Eastland Network, Electra, EA Networks, Horizon Energy Distribution, Mainpower, Marlborough Lines, Nelson Electricity, Network Tasman, Network Waitaki, Northpower, Orion, Powerco, PowerNet, Scan Power, The Lines Company, Top Energy, Unison, Vector, Waipa Networks, WEL Networks, Wellington Electricity Lines, Westpower	The AoB charge should recover as much of Transpower's recoverable costs/revenue as possible.

No.	Submitter	Submissions
107.	Trustpower, Bushnell/Wolak for Trustpower, Professor Yarrow for Trustpower, CEC for Trustpower, Houston Kemp for Trustpower, EA Networks, Vector, Entrust	The application of the AoB charge to existing assets cannot improve past investment decisions.
108.	Axiom for Transpower	The application of the AoB charge to existing investments would give rise to significant productive inefficiencies, including additional costs to estimate private benefits, and increased cost of disputes.
109.	Auckland Airport	The Authority should be less prescriptive as to which assets are included in the AoB charge, and should give Transpower the flexibility to include fewer assets in the AoB charge.
110.	Meridian Energy, NERA for Meridian Energy	The Authority should decide the assets in the AoB charge, because this is a question of policy, not technical implementation. Further, Transpower does not face neutral incentives to decide the scope of the AoB charge, due to its revenue cap. It would also be more efficient for the Authority to make the decision as to which assets are in the AoB charge, than for Transpower to make the decision for the Authority's consideration.
111.	Meridian Energy	The Authority's reasoning for expanding the AoB charge does not justify the risks of doing so. The proposed refinement is not more consistent with the DME framework. The rationale that the refinement will support efficient decisions regarding ownership is not material, and does not appear to have considered the implications of Part 4 of the Commerce Act on Transpower's decisions to hold or sell assets. The rationale that the proposed refinement will reduce potential distortions to the efficient location of load and generation is a hypothetical boundary issue. In relation to the Authority's goal of reducing the size of the residual, this will happen over time.
112.	Contact Energy	The benefits of adopting an AoB charge will be limited by the fact that the AoB charge will only apply to a small number of transmission assets, and that Transpower will recover the majority of its costs through the residual.
113.	Trustpower, Houston Kemp for Trustpower	The CBA does not support applying the AoB charge to existing assets.

No.	Submitter	Submissions
114.	NZ Steel	The extension of the AoB charge to existing assets is retrospective and unlawful. The Authority does not have the power to make retrospective regulations. Parties have made valid commercial decisions based on the RCPD charge and would have acted differently if they had known that there was going to be a change. This is unfair.
115.	Oji Fibre Solutions	The guidelines should require Transpower to extend the application of the AoB charge so that, to the extent possible, it includes all replacement and refurbishment assets, and enhancement and development capex.
116.	Westpower	The potential for broader coverage of the AoB charge means that investors will not be able to reliably predict transmission charges, potentially deterring investment on the West Coast. If the Authority proceeds with the proposed refinement, the Authority should amend the proposed guidelines to include a $50 million threshold for Transpower to bring any assets associated with historical investments within the AoB charge. Alternatively, Transpower should be required to optimise any assets associated with historical investments before bringing them within the AoB charge.
117.	Meridian Energy	The proposed refinement would result in the spreading of costs (a residual-like charge), without the protection set out in clause 32 of the guidelines in relation to the residual (for example, the obligation to correct for double counting).
118.	Trustpower, Professor Yarrow for Trustpower	The TPM should not include retrospective charges. Doing so would increase regulatory uncertainty and arbitrariness, and encourage lobbying. Doing so would also be inconsistent with a long-term contract model.
119.	Covec, Counties Power, Counties Power Consumer Trust, ENA, Entrust, Northern Federated Farmers, Northpower, Top Energy, Trustpower, Vector	The two reports that support the Authority's approach do not provide a convincing argument in support of including the eligible assets. The Littlechild report was comprehensively reasoned against by Professor Yarrow, and NERA's report is undermined by its earlier preference for peak demand charges.
120.	Covec, Counties Power, Counties Power Consumer Trust, ENA, Entrust, Northern Federated Farmers, Northpower, Top Energy, Trustpower, Vector	There is very little expert support for the proposal to retrospectively apply the AoB charge to existing assets.

No.	Submitter	Submissions
121.	Employers and Manufacturers Association (Northern), Auckland Chamber of Commerce	There is widespread opposition to the retrospective application of the AoB charge to assets that have already been paid for.
122.	NERA for Meridian Energy	The proposed refinement would result in diminished benefits and increased transaction costs.

Area of benefit charge: allowance for a transition for the broader coverage of the charge

No.	Submitter	Submissions
123.	Fonterra	The Authority should amend the proposed guidelines to direct Transpower to extend the AoB charge to other assets as soon as reasonably practicable, subject to the price cap.
124.	Fonterra	Questions the need for a two-staged approach/transition to bring assets within the AoB charge.
125.	Oji Fibre Solutions	Support a transition for broader coverage of the AoB charge.
126.	Pacific Aluminium, New Zealand Aluminium Smelter	The proposed refinement would not promote the Authority's statutory objective because it would slow the introduction of service-based and cost-reflective prices. A transition would avoid price increases for some customers, but would result in other customers paying inefficiently high prices for longer than they would have to otherwise.

Area of benefit charge: method for calculating the charge must be based on expected positive net private benefit

No.	Submitter	Submissions
127.	Trustpower, Houston Kemp for Trustpower	Because of the laws of physics, it is not logical to assess the asset-specific benefit of an asset that is part of the interconnected grid. Doing so is difficult, impractical, unrealistic, and contrary to the Authority's earlier conclusions about the interconnected grid.
128.	NZ Steel	Benefits should not be based on past actions. If revenue certainty is required, charges can be based on the previous year, as is the annual tariff process.
129.	Transpower	Clause 13 of the guidelines should be amended to include the practicability rider.

No.	Submitter	Submissions
130.	Transpower	Clause 16(d) of the guidelines should be removed, because the beneficiaries may have changed since the time of the proposal.
131.	Covec, Counties Power, Counties Power Consumer Trust, ENA, Entrust, Northern Federated Farmers, Northpower, Top Energy, Trustpower, Vector	Experts disagreed with the proposition that there is a mechanism for accurately assessing the beneficiaries of shared assets.
132.	Covec, Counties Power, Counties Power Consumer Trust, ENA, Entrust, Northern Federated Farmers, Northpower, Top Energy, Trustpower, Vector	Experts have identified that: the proposed AoB charge would be complex and contentious; it would be difficult to identify beneficiaries; and the AoB charge would become less accurate over time.
133.	Transpower	In clause 13 of the guidelines, the addition of the word "private" before "benefit" potentially brings in non-electricity market benefits, which is not appropriate. Transpower has suggested alternative wording.
134.	Oji Fibre Solutions	It is important that the method for calculating the AoB charge is practical, stable, able to be understood, and makes sense to consumers. The current method for calculating the AoB charge does not pass that test. For example, the Authority's calculations of the AoB charge for Oji Fibre Solutions' Kinleith Mill do not make sense. The TPM guidelines should include a requirement that transmission customers be able to understand how the AoB charge (as it applies to them) has been calculated.
135.	EA Networks, Axiom for Transpower	It is impossible for Transpower to accurately estimate private benefits over the life of an asset, which would lead to disputes.
136.	Oji Fibre Solutions	Oppose calculating benefits based on expected positive net private benefit, due to the complexity of the grid and the high number of assumptions that would need to be made. Instead, clause 16 of the guidelines should be amended so that the AoB charge is calculated based on actual "benefits received" over the previous assessment period, from the eligible investment in that area of benefit. Clause 17(d) of the guidelines would also require a consequential amendment.

No.	Submitter	Submissions
137.	Orion	The AoB charge allocates a given cost. Accordingly, a calculation method for AoB may result in some parties paying charges below their benefit, despite those parties' willingness to pay. This is inconsistent with the beneficiaries-pay principle.
138.	NZ Steel	The guidelines relating to the AoB charge should incorporate a power for Transpower to make changes to the allocation of the AoB charge to avoid anomalies and irrational results.
139.	Pacific Aluminium, New Zealand Aluminium Smelter	The Authority should align its benefit calculation test with the Commerce Commission's expected net market benefit test. The two tests aim to measure the same set of benefits. Setting charges based on the grid investment test would: encourage effective involvement by industry participants in the process of investment evaluation; provide a stimulus for correct forecasting; inform future decisions; and avoid technical problems with the modelling approach used by the Authority. However, small differences might occur in practice as an estimate for the AoB charge would exclude transmission customers receiving a net cost, and include only transmission customers who receive a positive private net benefit; and exclude any benefits to Transpower, such as operational benefits not included in the modelling.
140.	PwC, Alpine Energy, Aurora Energy, EA Networks, Eastland Network, Electra, Mainpower, Marlborough Lines, Nelson Electricity, Network Tasman, Northpower, The Lines Company, Top Energy, Waipa Networks, Westpower	The Authority should clarify whether it intends to apply the residual principles to the AoB charge, because doing so may be difficult.
141.	PwC, Alpine Energy, Aurora Energy, EA Networks, Eastland Network, Electra, Mainpower, Marlborough Lines, Nelson Electricity, Network Tasman, Northpower, The Lines Company, Top Energy, Waipa Networks, Westpower	The Authority should consider using RCPD as an allocator for the AoB charge, to leverage existing systems and processes and reduce implementation costs.

No.	Submitter	Submissions
142.	NZ Steel	The Authority's proposals do not adequately provide for the recognition of load diversification benefits available from direct connects and large loads embedded in EDBs' networks.
143.	Trustpower, Houston Kemp for Trustpower	The benefit calculation for the AoB charge is not workable because: it requires information that is not feasible to obtain or estimate (for example, current and future users of the network, current and future demand); benefits are highly dependent on assumptions and the counterfactual; estimating benefits is likely to be contentious; and Transpower will have to update its benefit calculations over time.
144.	Northpower, Northern Federated Farmers	The calculation of benefits is not correct, because Northland did not trigger the need for the NIGU or the NAaN grid upgrades.
145.	Northland Regional Council, Northland Inc, Northland Chamber of Commerce, Northpower	The calculation of benefits is not correct, because Northland has not benefited from national grid upgrades in terms of additional security of supply. For example, Northland lost supply on 5 February 2017 as a result of a Transpower outage, and some submitters said that, despite the recent grid upgrades, Northland has often been operating on N security, rather than N-1 security. Northland Regional Council's submission provides further examples of recent losses of supply to Northland caused by adverse events.
146.	Top Energy, Ngawha Generation	The calculation of the AoB charge should take into account investments by industry participants that are committed to or commissioned at the time that transmission charges are determined. This would provide clarity to Top Energy about whether the Ngawha plant is included in the assessment of benefits. Top Energy's view is that the Ngawha plant should be included, as this would be service-based and cost-reflective.
147.	Pacific Aluminium, New Zealand Aluminium Smelter	The method for calculating benefits under the AoB charge is too complex.

No.	Submitter	Submissions
148.	Covec, Counties Power Consumer Trust, Entrust, Northern Federated Farmers, Top Energy, Trustpower, Vector, ENA, Alpine Energy, Aurora Energy, Buller Electricity, Counties Power, Eastland Network, Electra, EA Networks, Horizon Energy Distribution, Mainpower, Marlborough Lines, Nelson Electricity, Network Tasman, Network Waitaki, Northpower, Orion, Powerco, PowerNet, Scan Power, The Lines Company, Unison, Vector, Waipa Networks, WEL Networks, Wellington Electricity Lines, Westpower, Fonterra, Entrust, Transpower, Northpower, Oji Fibre Solutions, IEGA, Pioneer Energy, NZ Energy, Otago Chamber of Commerce	The method for calculating the AoB charge would be highly sensitive to small changes in modelling assumptions.
149.	Northpower	The second issues paper did not correctly assess an area of benefit on the basis of what caused the need for an investment.
150.	Meridian Energy	Support the proposed refinement. The guidelines should give more weight to this point in the articulation of the trade-off between accuracy and practicality.

Area of benefit charge: the standard method for the charge must be as accurate as is reasonably practicable

No.	Submitter	Submissions
151.	PwC, Alpine Energy, Aurora Energy, EA Networks, Eastland Network, Electra, Mainpower, Marlborough Lines, Nelson Electricity, Network Tasman, Northpower, The Lines Company, Top Energy, Waipa Networks, Westpower	Broadly support the proposed refinement. The refinement would increase discretion for Transpower, which may reduce implementation costs, but will also increase uncertainty.

No.	Submitter	Submissions
152.	Meridian Energy	Support the proposed refinement. The guidelines should give more weight to this point in the articulation of the trade-off between accuracy and practicality.
153.	Meridian Energy	The guidelines should give more weight to the "minimal discretion" part of the articulation of the trade-off between accuracy and practicality.
154.	Transpower	The proposed refinement is meaningless and should be removed.
155.	Axiom for Transpower, Transpower	The proposed refinement is not workable, because the AoB charge would not send accurate, cost-reflective price signals.

Area of benefit charge: in determining the standard and simplified methods for the charge, Transpower must weigh the economic benefits of sending accurate price signals

No.	Submitter	Submissions
156.	PwC, Alpine Energy, Aurora Energy, EA Networks, Eastland Network, Electra, Mainpower, Marlborough Lines, Nelson Electricity, Network Tasman, Northpower, The Lines Company, Top Energy, Waipa Networks, Westpower	Broadly support the proposed refinement. The refinement would increase discretion for Transpower, which may reduce implementation costs, but would also increase uncertainty.
157.	Transpower	The proposed refinement should not refer to "accurate or useful price signals", because the AoB charge will not provide a price signal.

Area of benefit charge: simplified method

No.	Submitter	Submissions
158.	Business NZ, Canterbury Employers' Chamber of Commerce, Business Central	The $5 million threshold for distinguishing between low value and high value investments is arbitrary. The simplified method should apply only if Transpower cannot reasonably apply the standard method (subject to the overarching requirements for calculating the AoB charge, such as the minimisation of transaction costs, ensuring the charge can be understood, etc). This approach would be consistent with giving Transpower greater flexibility in determining how to apply the guidelines.
159.	Read for Meridian	Developing a different simplified method may not be useful. Instead, the guidelines should outline a form of an idealised (if unattainable) benefit incidence calculation that can function as a reference point for future development. The guidelines should then establish a process of assessing and enhancing performance of the benefit incidence calculation, in terms of progress towards that reference point. In that context, structural detail regarding a simplified method would inappropriately constrain development.
160.	Transpower	In clause 17(c) of the guidelines, the word "majority" should be changed to "main". Majority is the wrong word.
161.	Transpower	In clauses 9 and 10 of the guidelines, it is not clear whether the standard method can be applied to low value investments as well as high value ones.
162.	Pacific Aluminium, New Zealand Aluminium Smelter	It is not clear whether a simplified method is required. Instead, the Authority should merge the standard and simplified methods, and give guidance to Transpower that accuracy is more important for high value investments, and that simplicity and transparency is more important for low-value investments.
163.	Transpower	Clause 17(b) of the guidelines misses the point of the simplified method. The reason the method is simplified is to reduce analytical rigour, not to make the analysis more understandable.
164.	Axiom for Transpower	The Authority has not provided enough clarity about the practical distinction between the standardised and simplified methods, particularly in a case in which a more aggregated approach is used to measure private benefits.

Area-of benefit charge: Transpower must average benefits under two or more likely scenarios if benefits cannot be realistically estimated using one scenario

No.	Submitter	Submissions
165.	PwC, Alpine Energy, Aurora Energy, EA Networks, Eastland Network, Electra, Mainpower, Marlborough Lines, Nelson Electricity, Network Tasman, Northpower, The Lines Company, Top Energy, Waipa Networks, Westpower	Broadly support the proposed refinement. The refinement would increase discretion for Transpower, which may reduce implementation costs, but would also increase uncertainty.
166.	Transpower	Clause 14 of the guidelines, which provides for the proposed refinement, is overly prescriptive and should be removed. In any case, the word "likely" should be removed, as it would preclude the consideration of scenarios that are of a significant probability but have a probability of less than 51%.
167.	Transpower	The proposed refinement does not resolve issues with calculating benefits, in particular the issue that the results are highly sensitive to modelling inputs.
168.	Axiom for Transpower	The proposed refinement would introduce unnecessary complexity and uncertainty, especially in relation to identifying and modelling the "most likely scenarios".

Area-of benefit charge: Transpower may seek a determination from the Authority if Transpower considers that averaging does not result in a robust estimate of benefits

No.	Submitter	Submissions
169.	Meridian Energy	Support the proposed refinement.
170.	Transpower	The proposed refinement does not resolve issues with calculating benefits, in particular the issue that the results are highly sensitive to modelling inputs.
171.	Transpower	The proposed refinement may assist Transpower by shifting contentious decisions to the Authority.
172.	Transpower	The proposed refinement should apply more generally to the method used to calculate AoB, and not just to instances where Transpower has carried out the "averaging" exercise.

Area-of benefit charge: removal of requirement that charges to generation and load must be allocated according to respective proportions of expected aggregate benefits

No.	Submitter	Submissions
173.	Transpower	Support the proposed refinement, as it removes an unnecessary and redundant provision.

Area-of benefit charge: calculation of net private benefits would take into account increases and decreases in LCE

No.	Submitter	Submissions
174.	Houston Kemp for Trustpower	The proposed refinement logically follows from the rationale for the AoB charge.
175.	Meridian Energy	Support the proposed refinement. The calculation of benefits should also include benefits arising in ancillary service markets.
176.	Orion	Do not support the proposed refinement, because distributors do not see the effect of LCE on the spot market.
177.	Orion	The proposed refinement would create perverse incentives for distributors to oppose efficient grid investments, because of the way distributors pass-through LCE.
178.	Transpower	Factoring in the LCE increase or decrease should be mandatory only under the standard method, and should be subject to the practicability rider.

Area-of benefit charge: price signals of charge

No.	Submitter	Submissions
179.	ENA, Alpine Energy, Aurora Energy, Buller Electricity, Counties Power, Eastland Network, Electra, EA Networks, Horizon Energy Distribution, Mainpower, Marlborough Lines, Nelson Electricity, Network Tasman, Network Waitaki, Orion, Powerco, PowerNet, Scan Power, The Lines Company, Top Energy, Unison, Vector, Waipa Networks, WEL Networks, Wellington Electricity Lines, Westpower	In principle, AoB is an appropriate charging mechanism for sunk costs (assuming that LRMC is also used as a forward signal). Whether the AoB charge is fit for purpose will depend on the way that Transpower designs the charge.
180.	Covec, Counties Power, Counties Power Consumer Trust, ENA, Entrust, Northern Federated Farmers, Northpower, Top Energy, Trustpower, Vector, Trustpower, Houston Kemp for Trustpower, PwC, Alpine Energy, Aurora Energy, EA Networks, Eastland Network, Electra, Mainpower, Marlborough Lines, Nelson Electricity, Network Tasman, The Lines Company, Top Energy, Waipa Networks, Westpower, Axiom for Transpower	The AoB charge would not provide a forward-looking price signal, as beneficiaries will be unable to reliably estimate the way that charges will change as a result of new investments.
181.	Trustpower, Houston Kemp for Trustpower	The AoB charge would not provide a forward-looking price signal because transmission customers would not understand: the current and projected use of the network; how their usage will affect Transpower's estimation of benefits; how any changes in the network capacity could influence proposed investment and its cost; and how the Commerce Commission's approval processes may affect AoB charges.

No.	Submitter	Submissions
182.	Axiom for Transpower	The AoB charge would not provide an efficient shadow price signal, because: customers would be unlikely to draw a link between their actions and future costs; customers would be unlikely to accurately predict the AoB charges they would face if they respond in certain ways; the prices that customers would face would not reflect the gap between the LRMC of future investment costs and nodal pricing; customers may not respond to signals; and any benefit derived by customers could depend on the actions of others, resulting in a "tragedy of the commons".
183.	EA Networks, Axiom for Transpower	The AoB charge would provide less efficient ex-ante price signals than an LRMC or RCPD charge, because the conditions for efficient shadow pricing would not hold for the AoB charge, and because Transpower would not in practice use grid support payments.
184.	Axiom for Transpower	The Authority has concluded that the AoB charge would be more accurate than an LRMC charge, but this is not correct. Shadow price signals provided by the AoB charge would be unpredictable and inaccurate before an investment is built. The allocation of benefits after an investment is built would be prone to error given the challenges associated with estimating benefits.
185.	Axiom for Transpower	The Authority has concluded that the AoB charge would be more flexible than an LRMC charge. Such a conclusion suggests that LRMC has "no work to do" because reductions in demand would not affect the timing/size of investment. If that were the case, there would be no need to send a price signal of any kind, including via an AoB charge.

Area-of benefit charge: other

No.	Submitter	Submissions
186.	NZ Steel	Agree in principle with the economic purposes of the AoB proposal. However, to reflect the practicality of markets, the AoB charge should ensure: that payments are proportional to benefits; benefits are calculated transparently; and large, easily-targeted parties have the right to have direct input in the application of the formula, and that these parties are consulted. These criteria are not currently met by the Authority's proposal.
187.	Awarua Synergy, Dongwha, EIS, E-Type Engineering, HW Richardson Group, Southland Chamber of Commerce, South Port, Sarah Dowie MP, Southland District Council, Southland Manufacturers Trust, Southland Mayoral Forum, Todd Barclay MP, Invercargill City Council, Gore District Council, Grey Power Southland, Export Southland, Otago Southland Employers' Association, Port Otago, Queenstown Lakes District Council, Dunedin City Council, Clutha District Council, University of Otago	Agree that the AoB charge is cost-reflective and service-based.
188.	Pioneer Energy, Otago Chamber of Commerce	Any adjustments to an AoB allocator should be done consistently and transparently, to ensure fairness. For example, the Authority's modification of Top Energy's AMD is arbitrary.
189.	Transpower, Axiom for Transpower	AoB charges could impact on generators' spot market offers, for example because charging based on average injection would alter a generator's short-run marginal costs.
190.	Transpower	Clause 16(c) of the guidelines requires that the standard method must limit the need for Transpower to exercise discretion. This should be removed, because Transpower will need to exercise considerable discretion when it comes to estimating net benefits.

No.	Submitter	Submissions
191.	Covec, Counties Power, Counties Power Consumer Trust, ENA, Entrust, Northern Federated Farmers, Northpower, Top Energy, Trustpower, Vector	Expert reports identify that there are risks of material and unintended consequences as a result of the AoB charge.
192.	Employers and Manufacturers Association (Northern), MediaWorks	Industry stakeholders oppose the Authority's views that an AoB charge will send desirable price signals, and that the AoB charge is superior to alternatives. Those two principles underpin the Authority's proposals, and the Authority appears unwilling to change its view.
193.	Axiom for Transpower	Introducing an AoB charge would not have a beneficial effect on the new investment approval process. It is more likely to have a negative impact by creating unconstructive opposition to all investment proposals.
194.	Transpower	In clause 47(f), the reference to "standard investment" should be "eligible investment", because "standard investment" is not defined in the guidelines.
195.	CEC for Trustpower	Meridian submits that customers should not pay a charge higher than the benefit received, in relation to an asset, which suggests that there are equity concerns. However, asset-specific beneficiaries-pay is not necessarily the answer to equity concerns, and the effect of any particular inequities may cancel each other out, resulting in a fair charging regime overall.
196.	CEC for Trustpower	Meridian's submission that customers should not pay a charge higher than the benefit received in relation to an asset suggests that such pricing will improve investment planning. However, investments will invite scrutiny if customers face charges that exceed their benefits, not reflect their benefits.
197.	Covec, Counties Power, Counties Power Consumer Trust, ENA, Entrust, Northern Federated Farmers, Northpower, Top Energy, Trustpower, Vector	Most experts that commented on this point do not agree that the AoB charge would be superior to alternatives.

No.	Submitter	Submissions
198.	Trustpower, CEC for Trustpower	NERA for Meridian stated that beneficiaries-pay was in accord with workably competitive market outcomes. There is no evidence for this view. Prices in workably competitive markets are not usually charged based on an allocation reflecting private benefits.
199.	Grey Power Southland	Requiring those who benefit from an investment to pay for it will result in greater scrutiny of what investments are made and where.
200.	Venture Southland, Awarua Synergy, Dongwha, EIS, E-Type Engineering, HW Richardson Group, Southland Chamber of Commerce, South Port, Sarah Dowie MP, Southland District Council, Southland Manufacturers Trust, Southland Mayoral Forum, Todd Barclay MP, Invercargill City Council, Gore District Council, Grey Power Southland, Export Southland, Otago Southland Employers' Association, Port Otago, Queenstown Lakes District Council, Dunedin City Council, Clutha District Council, University of Otago, W Devine, Contact Energy, Business NZ, Canterbury Employers' Chamber of Commerce, Business Central	Support the AoB charge.
201.	Pacific Aluminium, New Zealand Aluminium Smelter	Support the material change in circumstances for the AoB charge, including a material change in consumption, so long as the change is not for the purposes of avoiding charges. The material change in circumstances under the AoB charge would be difficult to trigger and may therefore encourage inefficient behaviour.
202.	Unison, Centralines	Support the proposed refinements in relation to the AoB charge.

No.	Submitter	Submissions
203.	Transpower	The $5 million threshold for reviewing the application of the AoB charge if there has been a material change in circumstances is too low. It should be replaced with a $20 million threshold, which would be consistent with the Commerce Commission's base capex threshold.
204.	Trustpower, Houston Kemp for Trustpower	The AoB charge is neither service-based nor cost-reflective. It is not service-based because it is not applied to a service that can be isolated from other services provided by the network as a whole. It is not cost-reflective because it reflects benefits. Further, any TPM that recovers Transpower's revenue will be, in a sense, cost-reflective.
205.	Pioneer Energy, Otago Chamber of Commerce	The AoB charge should be allocated at the interconnection level, not the GXP level. This would provide parties with more certainty.
206.	ENA, Alpine Energy, Aurora Energy, Buller Electricity, Counties Power, Eastland Network, Electra, EA Networks, Horizon Energy Distribution, Mainpower, Marlborough Lines, Nelson Electricity, Network Tasman, Network Waitaki, Northpower, Orion, Powerco, PowerNet, Scan Power, The Lines Company, Top Energy, Unison, Vector, Waipa Networks, WEL Networks, Wellington Electricity Lines, Westpower	The AoB charge should be durable and consistent over time.
207.	Sarah Dowie MP	The AoB charge will encourage energy intensive industry to be located closer to electricity generation. This will promote better outcomes for New Zealand.
208.	Counties Power, Counties Power Consumer Trust	The AoB charge will not result in an improvement in static efficiency because it will suppress usage without an efficiency gain (given that the charge recovers investments in existing assets).
209.	Covec, Counties Power, Counties Power Consumer Trust, ENA, Entrust, Northern Federated Farmers, Northpower, Top Energy, Trustpower, Vector	The AoB charge would become less reflective of benefits over time. This would lead to a loss of durability as supply and demand patterns change.

No.	Submitter	Submissions
210.	Axiom for Transpower	The AoB charge would result in higher future wholesale prices, because levying an additional fixed charge from generators would increase the average expected wholesale electricity price required to make new generation investments.
211.	Trustpower, Houston Kemp for Trustpower	The AoB charge is inconsistent with the Authority's DME framework, because it is not service-based and cost-reflective. The Authority has chosen AoB based on other considerations.
212.	Axiom for Transpower	The Authority considers that the beneficiaries-pay nature of the AoB charge means that it would be durable. This presumes that the price signals provided by AoB would be efficient, which is not correct.
213.	Trustpower, Bushnell/Wolak for Trustpower, Axiom for Trustpower	The Authority has failed to account for inefficiencies in generation investment arising from the AoB charge (for example, disincentives to invest in the South Island relative to the North Island, and incentives to invest in areas served by pre-2004 assets).
214.	Pioneer Energy, Otago Chamber of Commerce	The Authority has ignored economic sizing principles in its allocation, which reduces the efficiency of allocating costs on the basis of private benefits.
215.	Axiom for Transpower	The Authority has not addressed how customers that enter an "area of benefit" after an investment has been made would be assigned a share of those sunk assets.
216.	Auckland Chamber of Commerce	The Authority has not demonstrated that an AoB based approach is the right approach to achieve the Authority's desired outcomes.
217.	Northpower	The Authority's proposals are not consistent with the principle of service-based pricing. Under the Authority's proposals, Transpower's customers will pay different charges for the same level of service based on the age of the transmission asset supplying them. However, service-based pricing requires that customers pay the same charges for the same level of service, irrespective of the age of the assets supplying them.
218.	Meridian Energy	The guidelines should include principles that articulate the fundamental features of the AoB charge.

No.	Submitter	Submissions
219.	Top Energy, Ngawha Generation	The term "material change in circumstances" for the purposes of the AoB charge is not defined, and should be interpreted to cover any significant or ongoing change in use of one or more assets.
220.	Transpower	In clause 47(f), the reference to "standard investment" should be "eligible investment", because "standard investment" is not defined in the guidelines.
221.	Fonterra	Transpower should be required to consult widely on the allocation methodology for the AoB charge.
222.	Fonterra	Transpower should be required to develop a transparent methodology for the AoB charge that is capable of producing repeatable results.

Valuation for area-of-benefit charge (paragraphs 3.37–3.67)

Valuation for AoB charge: indexed historical cost to be used to determine annual area-of-benefit charges

No.	Submitter	Submissions
223.	Pacific Aluminium, New Zealand Aluminium Smelter	Applying indexed historical cost to new investments will increase the inefficiency of the residual charge and result in a cross-subsidy from low growth regions to high growth regions. The transfer would not be neutral in terms of incidence, because the customers paying the various charges are likely to change over time.
224.	Transpower	Clauses 26 to 30 of the guidelines are confusingly unclear as to whether they relate to annual charges or valuation. Transpower is of the view that clauses 26 to 29 of the guidelines are intended to relate to valuation and clause 30 of the guidelines is intended to relate to annual charges. Transpower has suggested alternative drafting.

No.	Submitter	Submissions
225.	Venture Southland, Awarua Synergy, Dongwha, EIS, E-Type Engineering, HW Richardson Group, Southland Chamber of Commerce, South Port, Sarah Dowie MP, Southland District Council, Southland Manufacturers Trust, Southland Mayoral Forum, Todd Barclay MP, Invercargill City Council, Gore District Council, Grey Power Southland, Export Southland	Depreciated assets should not be funded/charged for in a way that allows Transpower to recover more than they are worth / recover their costs more than once. The valuation method should be consistent with cost-reflective and service-based pricing.
226.	Axiom for Transpower, Pacific Aluminium, New Zealand Aluminium Smelter	Developing and implementing a new indexed historical cost asset valuation methodology would introduce unnecessary complexity. Adopting the approach currently used for valuing connection assets would avoid design and implementation costs.
227.	Meridian	HVDC assets have been treated as a self-contained "mini-RAB" with additions in depreciation being determined in accordance with standard building block principles. There is a tight link between the building blocks which set the allowable revenue in the TPM which allocates this to customers as if it was a separate regulated business in its own right. Adopting a new valuation approach without taking into account that funding of depreciation would be an unlawful outcome, as it would artificially inflate the amount paid by the customers and give a windfall to those who pay for other assets under the residual.
228.	Transpower, Orion	In clause 27(b) of the guidelines "cost-effective" should read "cost-reflective".
229.	Transpower	In clause 6(a) of the guidelines, the "calculated as if" wording in brackets makes it unclear how the full cost is to be determined. More clarity is required.

No.	Submitter	Submissions
230.	Venture Southland, Awarua Synergy, Dongwha, EIS, E-Type Engineering, HW Richardson Group, Southland Chamber of Commerce, South Port, Sarah Dowie MP, Southland District Council, Southland Manufacturers Trust, Southland Mayoral Forum, Todd Barclay MP, Invercargill City Council, Gore District Council, Grey Power Southland, Export Southland, Contact Energy	It is difficult to assess the implications of the proposed refinement.
231.	Meridian Energy	The proposed refinement is contrary to the approach of the Courts, and as such, may be subject to legal challenge. See *Vodafone New Zealand v Telecom New Zealand*; *Wellington International Airport v Commerce Commission*.
232.	Meridian Energy, Read for Meridian, Pacific Aluminium, New Zealand Aluminium Smelter, NERA for Meridian, Contact Energy, Professor Littlechild for Meridian	Moving from a "front-loaded" valuation method to indexed historical cost would result in some customers overpaying (e.g. by $400 million in relation to Poles 2 and 3), and windfall gains to other parties. Instead, the guidelines should specify that the AoB charge must account for depreciation.
233.	Transpower	Do not support the proposed refinement to require different and discriminatory valuation methods between existing and new investments. The basis for calculating the AoB charge should be as time-neutral as possible.
234.	Venture Southland, Awarua Synergy, Dongwha, EIS, E-Type Engineering, HW Richardson Group, Southland Chamber of Commerce, South Port, Sarah Dowie MP, Southland District Council, Southland Manufacturers Trust, Southland Mayoral Forum, Todd Barclay MP, Invercargill City Council, Gore District Council, Grey Power Southland, Export Southland	The Authority alone should be responsible for determining the value of historical transmission assets.

No.	Submitter	Submissions
235.	Contact Energy	The Authority appears to have adopted the indexed historical cost approach as a result of Transpower's submissions that a customer paying the AoB charge is less likely to end up paying twice because historical costs were lower; and that the risk of paying twice for an asset is further reduced when assets are relatively new. However, because only 3 or 4 parties have historically paid for Pole 2 of the HVDC link, the charges that those parties have historically paid are much higher than what they would have been required to pay under an AoB charge, and the HVDC link is not "relatively new".
236.	NERA for Meridian Energy	The Authority has accepted that the indexed historical cost approach would over-recover existing assets on the basis that those who will have to pay the new AoB charge for an investment will have, in the past, paid only a small fraction of the historical cost of the investment, because most costs have been socialised. This is inconsistent with cost-reflectivity, and for costs that have not been socialised (particularly the HVDC link), individual customers would be over-charged. The Authority has also accepted over-recovery on the basis that Transpower could never earn more than its MAR, but cost-reflectivity at an asset-specific level is important for the durability of the regime.
237.	NERA for Meridian Energy	The Authority should not leave the question of asset valuation and time profile of recovery to Transpower. This is a policy decision for the Authority. It would also be more efficient for the Authority to make the decision, than for Transpower to make the decision for the Authority's consideration.
238.	Axiom for Transpower, Pacific Aluminium, New Zealand Aluminium Smelter	The complexity of the indexed historical cost approach does not seem to be necessary given the option of simply retaining a replacement cost approach.
239.	NERA for Meridian Energy	The indexed historical cost approach could lead to unintended consequences.
240.	NERA for Meridian Energy, Professor Littlechild for Meridian, Pacific Aluminium, New Zealand Aluminium Smelter	The indexed historical cost approach would not reflect the realities of a workably competitive market.

No.	Submitter	Submissions
241.	Professor Littlechild for Meridian	The proposed refinement appears to be driven by the assumption that charges are constant over time in workably competitive markets. This is not characteristic of real competitive markets, particularly when benefits, demand and technologies change over time.
242.	Business NZ, Canterbury Employers' Chamber of Commerce, Business Central, Venture Southland, Awarua Synergy, Dongwha, EIS, E-Type Engineering, HW Richardson Group, Southland Chamber of Commerce, South Port, Sarah Dowie MP, Southland District Council, Southland Manufacturers Trust, Southland Mayoral Forum, Todd Barclay MP, Invercargill City Council, Gore District Council, Grey Power Southland, Export Southland	The proposed refinement could result in charges that are not cost-reflective.
243.	Meridian Energy, NERA for Meridian, Pacific Aluminium, New Zealand Aluminium Smelter	The proposed refinement is contrary to the approach of the Commerce Commission. This could result in misalignment and divergence from the revenue requirement, and may not pass the test of consistency with clause 12.89 of the Code.
244.	Meridian Energy, Read for Meridian, NERA for Meridian	The proposed refinement is contrary to the NPV = 0 principle, which is a fundamental principle of regulatory economics.
245.	PwC, Alpine Energy, Aurora Energy, EA Networks, Eastland Network, Electra, Mainpower, Marlborough Lines, Nelson Electricity, Network Tasman, Northpower, The Lines Company, Top Energy, Waipa Networks, Westpower	The proposed refinement is sensible. It would tie the value of assets to their costs and remove the expensive and subjective need for Transpower to carry out periodic asset revaluations.
246.	Meridian Energy, NERA for Meridian, Axiom for Transpower	The proposed refinement would create uncertainty.
247.	Meridian Energy, NERA for Meridian	The proposed refinement would harm the durability of the TPM.

No.	Submitter	Submissions
248.	Transpower	The use of the term "the full cost of all assets" in clause 6(a) of the guidelines is too restrictive, because eligible investments that are transmission alternatives will not produce assets.
249.	Meridian Energy, NERA for Meridian	The valuation method under the proposed refinement would result in greater recovery under the TPM for a depreciated asset than the asset contributes to the MAR. This could incentivise Transpower to sell assets, distorting Transpower's hold/sell decisions. While this issue is partly mitigated by the process for determining Transpower's future MAR, the Authority should minimise the extent of the divergence and monitor the issue.
250.	Pacific Aluminium, New Zealand Aluminium Smelter	The proposed refinement would have efficiency impacts if demand rises and transmission prices decrease (or vice versa). Transpower would be required to estimate demand over the life of an asset, which would be contentious.

Valuation for AoB charge: Transpower may propose alternative method for determining annual area-of-benefit charges that is service-based and cost-reflective

No.	Submitter	Submissions
251.	Meridian Energy	If the Authority incorporates depreciation into its valuation method, the proposed refinement would not be necessary. However, if levelled charges continue to be used, support the proposed refinement.
252.	PwC, Alpine Energy, Aurora Energy, EA Networks, Eastland Network, Electra, Mainpower, Marlborough Lines, Nelson Electricity, Network Tasman, Northpower, The Lines Company, Top Energy, Waipa Networks, Westpower	The proposed refinement is sensible.

Valuation for AoB charge: valuation method must promote efficient trade-off between economic benefits of sending an accurate price signal versus the cost of developing, implementing and administering the method

No.	Submitter	Submissions
253.	Transpower	The proposed refinement is confusing.
254.	Transpower	The proposed refinement should be deleted because the AoB charge will not send accurate or useful price signals to customers.

Valuation for AoB charge: Transpower may alter time profile of charges

No.	Submitter	Submissions
255.	PwC, Alpine Energy, Aurora Energy, EA Networks, Eastland Network, Electra, Mainpower, Marlborough Lines, Nelson Electricity, Network Tasman, Northpower, The Lines Company, Top Energy, Waipa Networks, Westpower	The proposed refinement is sensible.
256.	Transpower	The proposed refinement should be limited to high value investments. The $5 million threshold is too low and should be $20 million.
257.	Transpower	The proposed refinement would add additional complexity to the AoB charge.
258.	Pacific Aluminium, New Zealand Aluminium Smelter, Meridian Energy	The proposed refinement would not be necessary if the Authority adopts the Commerce Commission's valuation method.

Adjustments to charges (paragraphs 3.68–3.67)

Adjustments to charges: Transpower may use a suitable proxy if it is impracticable to establish amount to be recovered under the AoB charge in relation to a pre-guidelines eligible investment

No.	Submitter	Submissions
259.	Meridian Energy	Any proxy is likely to be highly contentious.
260.	Transpower	In clause 7 of the guidelines, it is not clear whether the "full cost" includes overhead and other expenses.

No.	Submitter	Submissions
261.	Venture Southland, Awarua Synergy, Dongwha, EIS, E-Type Engineering, HW Richardson Group, Southland Chamber of Commerce, South Port, Sarah Dowie MP, Southland District Council, Southland Manufacturers Trust, Southland Mayoral Forum, Todd Barclay MP, Invercargill City Council, Gore District Council, Grey Power Southland, Export Southland	In order to ensure that pricing is cost-reflective and service-based, the amount to be recovered under the AoB charge should be based on historic new costs, and not on a proxy.

Adjustments to charges: Transpower may scale-back charges if the method for determining the annual amount to be recovered under the AoB charge would result in over-recovery of Transpower's recoverable revenue

No.	Submitter	Submissions
262.	Transpower	Clause 29(a) of the guidelines is redundant because the residual charges will automatically be scaled back if there is over-recovery of the revenue requirement for an eligible investment. It is not necessary to distinguish between "the amount to be recovered by the residual charge excluding the overhead and unallocated costs" and those overhead and unallocated costs.
263.	Meridian Energy	Support the proposed refinement if levelled charges continue to be used.
264.	PwC, Alpine Energy, Aurora Energy, EA Networks, Eastland Network, Electra, Mainpower, Marlborough Lines, Nelson Electricity, Network Tasman, Northpower, The Lines Company, Top Energy, Waipa Networks, Westpower, Meridian Energy	The proposed refinement might be unnecessary. If indexed historical cost is used as an allocator only (ie, not for cost recovery), there should be no need for a scale-back mechanism.
265.	Transpower	The proposed refinement only compares part of Transpower's revenue requirement with part of Transpower's annual charges. Therefore, after the scaling contemplated by the proposed refinement, Transpower's revenue could still be exceeded by total annual charges.

No.	Submitter	Submissions
266.	Axiom for Transpower	The proposed refinement would introduce unnecessary complexity and uncertainty.

Optimisation available for high-value investments only (paragraphs 3.85–3.86)

No.	Submitter	Submissions
267.	Meridian Energy	Do not support the proposed refinement as currently framed. Optimisation should be available to parties that pay for assets that are significantly revalued under the indexed historical cost approach.
268.	Westpower	If the $50 million cap is not reintroduced, Transpower should be required to optimise any assets associated with historical investments identified for inclusion in the AoB charge in the future.
269.	Pacific Aluminium, New Zealand Aluminium Smelter	Support optimisation. Support restrictions on optimisation so that customers are not motivated to support over-investment in the expectation that they can apply for optimisation.
270.	Transpower	Support the proposed refinement. If optimisation is retained, the optimisation provisions should be less prescriptive and the arbitrary thresholds removed. The word "eligible" should be reinserted into clause 20 of the guidelines, to make it clear that optimisation does not apply to connection assets. $5 million is too low a threshold for optimisation and the threshold should be increased to $20 million, which would be consistent with the Commerce Commission's base capex threshold. In clause 21 of the guidelines, it is possible that "must" should be replaced with "must only". The Authority should be clear about whether Transpower has the discretion to optimise in circumstances outside of that covered by clause 21 of the guidelines.
271.	NZ Steel	The Authority should consider the issue of under-utilised assets, the costs of which should be borne by shareholders but are being borne by consumers. In a workably competitive market, there would be write-offs.

No.	Submitter	Submissions
272.	Transpower, IEGA, NZ Energy, Pioneer Energy, Otago Chamber of Commerce	The optimisation component should be removed altogether, because optimisation would already be considered under the valuation methodology.

Fall-back method for allocating the area-of-benefit charge to generation (paragraphs 3.87–3.90)

No.	Submitter	Submissions
273.	Meridian Energy	A fall-back method should be used only for low value assets where there is good information. In such cases, forecast average injection is the best method.
274.	Genesis Energy, Transpower	A fall-back method should not be specified in the guidelines.
275.	Transpower	Allocating to generators on the basis of average injection may not necessarily be efficient, as it could affect generators' wholesale market behaviour.
276.	Transpower	Clause 16(b) of the guidelines fails to provide guidance about how to apportion charges between load and generation.
277.	Pacific Aluminium, New Zealand Aluminium Smelter	It may not be efficient for the fall-back allocator for the AoB charge to be the allocator for the residual, because the residual is a tax-like charge.
278.	Mercury	Opposes a fall-back method based on average injection. Instead, the fall-back method described in clauses 16(b)(ii) and 17(e)(ii) of the guidelines should refer to an alternative generation charge that seeks to minimise, to the greatest extent practicable, inefficient distortions to generation investment, operation decisions, and wholesale market outcomes. A fall-back method based on a generator's average injection will create the same potential for distortions and inefficient outcomes as the Authority's (now disbanded) proposal to charge generators for the residual. As the AoB charge increases over time, so will the distortions.
279.	Transpower	The choice of fall-back allocator could result in unintended consequences. For example, using average injection as the allocator could result in substantial static inefficiencies.

No.	Submitter	Submissions
280.	Nova	The fall-back method should be based on historical average generation, but should take into account the number of hours during which a generator operated. Charges based on the fall-back method should be per hour of operation. This will ensure that generators are not charged for when they are not operating.
281.	Pacific Aluminium, New Zealand Aluminium Smelter	The fall-back method should reflect, as closely as possible, the benefits that a customer receives from an eligible investment.
282.	Houston Kemp for Trustpower, Trustpower	Using forecast injection rather than average injection is unlikely to solve any of the problems that have been identified with using actual injections. Using forecast injection may introduce new issues, in that the method will continue to act as a tax on injections, and that Transpower will be required to prepare (controversial) forecasts for each customer.

Align method for determining annual amount to be recovered in connection charges with the method for area-of-benefit assets (paragraphs 3.91–3.93)

No.	Submitter	Submissions
283.	Meridian Energy	Do not support the proposed refinement, because there are no practical problems with the connection charge, and because there may be issues in relation to asset valuation and annual revenue to be recovered.
284.	PwC, Alpine Energy, Aurora Energy, EA Networks, Eastland Network, Electra, Mainpower, Marlborough Lines, Nelson Electricity, Network Tasman, Northpower, The Lines Company, Top Energy, Waipa Networks, Westpower	The Authority has not provided enough information to assess the proposed refinement.

No.	Submitter	Submissions
285.	Trustpower, Houston Kemp for Trustpower	The Authority should be cautious in revaluing existing connection assets, because doing so will not address any efficiency incentives but may give rise to wealth transfers. There is no clear rationale to motivate a revised basis for the valuation of connection assets.

Marginal price adjustment (paragraphs 3.94–3.98)

No.	Submitter	Submissions
286.	Transpower	It would be better to remove the marginal cost adjustment provision altogether, because it may not be workable, and may have unintended consequences.
287.	Meridian Energy, Pacific Aluminium, New Zealand Aluminium Smelter, Transpower	Support the proposed refinement.
288.	Axiom for Transpower	The Authority has relegated the marginal benefit adjustment component to an additional component when it was previously mandatory. However, the Authority has failed to make other changes to the proposal aimed at addressing the problem that the component was trying to solve in the first place.
289.	Trustpower, Houston Kemp for Trustpower	The proposed refinement will address, but not eliminate, concerns about the marginal price adjustment mechanism. Parties will still be incentivised to conceal their investment plans from Trustpower.
290.	Pacific Aluminium, New Zealand Aluminium Smelter	The proposed refinement would reduce the inefficient avoidance of charges and avoids customers subsidising other customers.
291.	Meridian Energy, Pacific Aluminium, New Zealand Aluminium Smelter	Support charges being adjusted only if reduction in demand would result in a decrease in Transpower's costs.

Overhead and unallocated expenses allocated to connection assets and eligible investments to which they relate, to extent practicable (paragraphs 3.99–3.105)

No.	Submitter	Submissions
292.	Counties Power, Counties Power Consumer Trust	Do not support the proposed refinement, because it would result in companies acquiring Transpower assets by purchasing them or constructing their own transmission assets.
293.	Meridian Energy, NERA for Meridian	Overhead and unallocated costs should not be allocated to connection assets. Doing so would risk the arbitrary allocation of common costs, which would be distortionary.
294.	Pacific Aluminium, New Zealand Aluminium Smelter	Support the proposed refinement, as it would increase the service-based component of the TPM and minimise the residual. However, the proposed refinement would not be appropriate if it allocated common costs on a MWh/AMD basis, as these are not variables that drive cost.
295.	Meridian Energy, NERA for Meridian	The proposed guidelines should be amended to allow the allocation of costs only if they are directly attributable to an asset and not if they are common costs (with illustrative examples).
296.	PwC, Alpine Energy, Aurora Energy, EA Networks, Eastland Network, Electra, Mainpower, Marlborough Lines, Nelson Electricity, Network Tasman, Northpower, The Lines Company, Top Energy, Waipa Networks, Westpower	The proposed refinement is reasonable, if the allocation can be carried out in a cost-effective manner.

No.	Submitter	Submissions
297.	Venture Southland, Awarua Synergy, Dongwha, EIS, E-Type Engineering, HW Richardson Group, Southland Chamber of Commerce, South Port, Sarah Dowie MP, Southland District Council, Southland Manufacturers Trust, Southland Mayoral Forum, Todd Barclay MP, Invercargill City Council, Gore District Council, Grey Power Southland, Export Southland, Otago Southland Employers' Association, Port Otago, Queenstown Lakes District Council, Dunedin City Council, Clutha District Council, University of Otago	Unallocated overheads and expenses should, as far as possible, be allocated to the customers who benefit from those costs.

Residual charge (paragraphs 3.106–3.137)

Residual charge: load of each customer used to identify who is liable for the residual charge and extent to which those customers must pay

No.	Submitter	Submissions
298.	NZ Steel	Load should not be defined as a one-off maximum. The definition of load should leave open the timeframes for measurement.
299.	Meridian Energy	Support the proposed refinement.
300.	Fonterra	The allocation methodology for the residual will disadvantage customers who have distributed generation for reasons other than to avoid charges, because it will overstate the residual AMD for those customers. For example, Fonterra installed industrial co-generation to efficiently generate steam for industrial processes at differing pressures, and not to avoid charges.
301.	Oji Fibre Solutions, Fonterra, Entrust, Pacific Aluminium, New Zealand Aluminium Smelter	The Authority should provide for/consider charging the residual to generation as well as load.

No.	Submitter	Submissions
302.	Vector, Entrust	The Authority's proposal, particularly in relation to the HVDC link, results in significant and undesirable windfall gains for generators. This is inconsistent with the Court's conclusion in *Contact Energy Limited and Meridian Energy Limited v Electricity Commission and Transpower New Zealand Limited*, which was that South Island generators were the chief beneficiary of the HVDC link.
303.	Nova	The proposal imposes a tax on parties with co-generation. Co-generation should not be included in the calculation of a customer's load.
304.	Orion, Transpower	The proposed refinement may not be necessary, given that there is a separate refinement requiring that the residual charge must be related to the size of a customer's load.
305.	PwC, Alpine Energy, Aurora Energy, EA Networks, Eastland Network, Electra, Mainpower, Marlborough Lines, Nelson Electricity, Network Tasman, Northpower, The Lines Company, Top Energy, Waipa Networks, Westpower	The proposed refinement would unreasonably overcharge transmission customers that have significant on-network generation. Instead, the residual charge should be based on load net of distributed generation that is commissioned or committed to before the TPM guidelines are finalised, or that is commissioned after the TPM guidelines are published, for which there is a robust business case (excluding any avoided cost of transmission benefits). This would prevent inefficient DG investment while ensuring that the residual is based on actual supply.

Residual charge: residual charge calculated according to historical AMD or another method

No.	Submitter	Submissions
306.	NZ Steel	A blanket application of AMD leads to each residential ICP in South Auckland paying $1,063 per annum for transmission, which is clearly wrong. This demonstrates the inappropriateness of a blanket application of AMD.
307.	PwC, Alpine Energy, Aurora Energy, EA Networks, Eastland Network, Electra, Mainpower, Marlborough Lines, Nelson Electricity, Network Tasman, Northpower, The Lines Company, Top Energy, Waipa Networks, Westpower	An adjusted AMD approach would not be service-based and cost-reflective, and is focused too much on being difficult to avoid (as opposed to being focused on ensuring that charges reflect actual use).

No.	Submitter	Submissions
308.	Nova	Allocating the residual based on RCPD would provide a more simple measure of load, and would provide a strong incentive to reduce transmission peaks that will help defer the need for new investments.
309.	IEGA, NZ Energy, Pioneer Energy, Otago Chamber of Commerce, NZ Steel, PwC, Alpine Energy, Aurora Energy, EA Networks, Eastland Network, Electra, Mainpower, Marlborough Lines, Nelson Electricity, Network Tasman, Northpower, The Lines Company, Top Energy, Waipa Networks, Westpower, Fonterra	Do not support the use of AMD.
310.	Oji Fibre Solutions	Guideline 33 should be amended to allow Transpower to calculate the residual using one or a combination of: AMD over the previous assessment period; AMI over the previous assessment period; net load (MWh/annum) during the previous assessment period; net generation (MWh/annum) over the previous period; regional diverse loading over the previous assessment period; long run marginal costs; or another method that Transpower considers appropriate.
311.	IEGA, NZ Energy, Pioneer Energy, Otago Chamber of Commerce, Meridian Energy, Oji Fibre Solutions, Norske Skog, Auckland Airport	It is good that Transpower will have the discretion to determine the allocator for the residual charge.
312.	GBC Winstone	It remains unclear how AMD will be quantified. This uncertainty makes it difficult to undertake business planning, and affects GBC Winstone's commercial viability.
313.	Pacific Aluminium, New Zealand Aluminium Smelter	The allocator for the residual should result in a TPM that is broadly service-based. This can be tested empirically by comparing the price per MWh and the load factor of a customer. The analysis shows that NZAS pays illogically high charges under the proposal.
314.	NZ Steel	The AMD allocator is inappropriate because it is punitive.
315.	PowerNet	The AMD allocator is too narrow, because it does not apply to DG that is over nine years old.

No.	Submitter	Submissions
316.	NZ Steel	The allocation of charges based on AMD is retrospective and unlawful. The Authority does not have the power to make retrospective regulations. Parties have made valid commercial decisions based on the RCPD charge and would have acted differently if they knew that there was to be a change. This is unfair.
317.	Fonterra	The Authority should allow Transpower to determine how the residual is allocated, subject to the requirements of clause 32(a) to 32(e) of the guidelines.
318.	Trustpower, Houston Kemp for Trustpower, CEC for Trustpower, Bushnell/Wolak for Trustpower	The Authority's proposed fixed charge allocator is unlikely to be workable in practice.
319.	PwC, Alpine Energy, Aurora Energy, EA Networks, Eastland Network, Electra, Mainpower, Marlborough Lines, Nelson Electricity, Network Tasman, Northpower, The Lines Company, Top Energy, Waipa Networks, Westpower	The Authority's suggested allocation method for the residual (adjusted AMD) was not specified in the guidelines, so might not be adopted by Transpower.
320.	ENA, Alpine Energy, Aurora Energy, Buller Electricity, Counties Power, Eastland Network, Electra, EA Networks, Horizon Energy Distribution, Mainpower, Marlborough Lines, Nelson Electricity, Network Tasman, Network Waitaki, Northpower, Orion, Powerco, PowerNet, Scan Power, The Lines Company, Top Energy, Unison, Vector, Waipa Networks, WEL Networks, Wellington Electricity Lines, Westpower	The criteria for the residual are currently too focused on preventing parties from avoiding the charge. There should be more criteria regarding the choice of allocator for the residual charge.
321.	Oji Fibre Solutions	The guidelines should expressly state that Transpower may allocate the residual based on net MWh/annum. This approach considers total energy use/generation, and is unlikely to be gamed. Alternatively, the guidelines should expressly allow Transpower to use a mixture of energy and peak load allocators.

No.	Submitter	Submissions
322.	MEUG, Winstone Pulp International	The requirement that Transpower propose a residual allocator that is either AMD or "another method" should be amended to make it clear that Transpower may consider a hybrid method using AMD and/or other allocators. This could be done by replacing "another method" with "another method or methods" in clause 33 of the guidelines.
323.	Nova, Norske Skog	The residual should be allocated using an RCPD-based methodology.
324.	Oji Fibre Solutions	The residual should not be allocated on the basis of gross AMD, because that would not be equitable, durable, or promote dynamic efficiency. This is particularly the case for gross AMD calculated over (a) the last five years; or (b) the last ten years. This would (a) in the case of five years, penalise customers who responded to price signals the Authority created through the RCPD charge under the current TPM; and (b) in the case of ten years, ignore changes in business operation, and undermine energy efficiency initiatives. If the residual is allocated on the basis of gross AMD, it should be on the basis of the preceding twelve months only; or Transpower should have the flexibility to determine the timeframe relevant to the assessment.
325.	NZ Steel	The specification that Transpower may use AMD "or another method" is overly prescriptive, even though Transpower may choose a different method.
326.	Orion	The use of AMD would breach the equivalence principle. The Authority should instead use coincident maximum demand.
327.	Norske Skog	To minimise the wealth transfers that result from the residual, fixed costs should be allocated based on RCPD.
328.	Unison, Centralines	Transpower has too much discretion regarding the allocator for the residual charge. The TPM guidelines should be amended to state that historical AMD is the preferred allocation method unless this is inadequate, and that LRMC needs to be used to send a stronger price signal. This would reduce lobbying to Transpower.
329.	Transpower	Using HAMI as the allocator for the residual charge would not achieve the requirements of clause 32(d) to (f) of the guidelines.

Residual charge: charge must be designed to ensure that residual charge cannot change as a consequence of a customer's actions or the actions of another party (except Transpower), such that it does not create incentive to inefficiently avoid the charge

No.	Submitter	Submissions
330.	Oji Fibre Solutions	Because it does not send signals to transmission customers to adopt more efficient non-transmission alternatives at peak times, the allocation mechanism for the residual will not promote dynamic efficiency. As a result, the TPM will be inconsistent with the Authority's statutory objective.
331.	Winstone Pulp International	Disagree that the residual should be allocated based on a long-term historical average. The TPM guidelines should allow Transpower to allocate the residual based on, for example, the average of a consumer's 100 highest half-hourly loads. Reasonable actions taken to minimise business costs are not the same as efforts to "inefficiently avoid" a charge, and the Authority has relied on incorrect assumptions when coming to the view that efforts by large consumers to reduce their costs will result in others unfairly meeting those costs.
332.	Oji Fibre Solutions	Clause 32(d) of the guidelines should be amended so that it also requires the allocation method for the residual to create incentives for designated transmission customers to efficiently avoid the residual charge (by reducing grid use and deferring the need for new investments). This will help promote dynamic efficiency. The reference in clause 32(d) of the guidelines to a customer's or other party's actions not changing a customer's residual charge should also be removed.
333.	Transpower, Meridian Energy	Support the proposed refinement.
334.	Nova	The Authority's approach will dilute measures being taken in the retail market to better signal the long term cost of building network capacity to meet peak demand (for example, the introduction of advanced meters and time-of-use pricing).

No.	Submitter	Submissions
335.	Business NZ, Canterbury Employers' Chamber of Commerce, Business Central	The proposed methodology for the residual does not reflect the complexity of business decisions, or take into account the ability of the new TPM guidelines to send more efficient price signals. If the Authority's approach to the residual is to address a problem of inappropriate price signals, the Authority should instead amend the TPM guidelines to address that problem.
336.	Transpower, Business NZ, Canterbury Employers' Chamber of Commerce, Business Central	The proposed refinement is drafted too widely because it assumes that a customer can never act legitimately to reduce its residual allocation, for example, by reducing its gross load.
337.	Counties Power, Counties Power Consumer Trust	The proposed refinement is fine in principle, but is an extreme form of Ramsey pricing and is not practicable. Transpower should have the flexibility to consider other options.
338.	Orion	The proposed refinement is inconsistent with the Authority's guidelines for how it will assess compliance with the low fixed charge regulations, because distributors will have to recover the residual (a fixed charge) through variable charges. The refinement would result in a situation in which distributors would need to price in a way that the regulations prohibit.
339.	Transpower	The proposed refinement may conflict with clause 32(a) and (e) of the guidelines, which require that the residual be based on load.
340.	Nova	The proposed refinement removes signals that reflect the marginal cost of supplying grid services or increasing transmission capacity. Those price signals are necessary to create incentives to minimise peak load (for example, through embedded generation or demand response), and avoid the need for new investments in the grid.
341.	PwC, Alpine Energy, Aurora Energy, EA Networks, Eastland Network, Electra, Mainpower, Marlborough Lines, Nelson Electricity, Network Tasman, Northpower, The Lines Company, Top Energy, Waipa Networks, Westpower	The proposed refinement should be clarified to focus only on actions taken by participants after the new TPM guidelines are introduced.

No.	Submitter	Submissions
342.	Transpower	The proposed refinement should use the practicability rider instead of the unusual words "to the extent that it can be economically achieved".
343.	Westpower	The refinement resolves Westpower's concerns about the capacity-based residual charge set out in the second issues paper.
344.	Nova	The TPM guidelines should recognise the importance of demand response and generation response to security of supply.

Residual charge: charge must be related to size of the load of the customer

No.	Submitter	Submissions
345.	Meridian Energy, Pacific Aluminium, New Zealand Aluminium Smelter	Support the proposed refinement.
346.	Orion	The proposed refinement implies that charges will change over time, which contradicts the other requirement that the residual not change.
347.	PwC, Alpine Energy, Aurora Energy, EA Networks, Eastland Network, Electra, Mainpower, Marlborough Lines, Nelson Electricity, Network Tasman, Northpower, The Lines Company, Top Energy, Waipa Networks, Westpower	The proposed refinement is too vague, because the size of a customer's load can be measured in several different ways. The refinement should be amended to state that residual costs are related to the "size of the load" of the transmission customer, net of distributed generation.
348.	Transpower	The proposed refinement should be deleted. The guidelines should not prescribe that the residual be allocated on the basis of load. The key point about residual charge allocation is that it should not be able to be avoided through inefficient investment, and there may be better ways to achieve this than a load-based allocation.
349.	Transpower	The reference to durability should be deleted, as it is vague and probably redundant.
350.	Oji Fibre Solutions	The residual charge should be related to the *net* load and/or *net* generation of the transmission customer, because that is a proxy for the actual assets each customer requires.

No.	Submitter	Submissions
351.	Winstone Pulp International	The size of the load of each consumer should be determined at the ICP level. The guidelines should be amended to make it clear that the guidelines do not preclude Transpower from considering this option.

Residual charge: residual charge must be designed so that any DG that has paid or credited for transmission charges avoided by the relevant distributor would not receive such payment or credit in respect of the residual charge component of their distributor's transmission charges

No.	Submitter	Submissions
352.	Meridian Energy, Unison, Centralines	Support the proposed refinement.
353.	Buller Electricity	The proposed refinement conflicts with the adoption of adjusted AMD because offsetting distributed generation against the residual might be permitted under adjusted AMD.
354.	Orion	The proposed refinement contradicts the principle that charges must reflect load.
355.	Pioneer Energy, Otago Chamber of Commerce	The proposed refinement is unnecessary, given the DGPP reforms.
356.	Pioneer Energy, Otago Chamber of Commerce	The proposed refinement should be amended to clarify the definition of distributed generation (for example, in relation to solar PV and batteries).
357.	Transpower	The proposed refinement should be deleted because payments between distributors and embedded generators are not controlled by the TPM, but are a matter for the DGPPs and private contracts. If the Authority wants the residual charge methodology to disregard DG, the guidelines should say so explicitly.
358.	PwC, Alpine Energy, Aurora Energy, EA Networks, Eastland Network, Electra, Mainpower, Marlborough Lines, Nelson Electricity, Network Tasman, Northpower, The Lines Company, Top Energy, Waipa Networks, Westpower	The proposed refinement should not be included in the TPM as it may distort other issues. It should be moved to Schedule 6.4 of the Code.

No.	Submitter	Submissions
359.	Covec, Counties Power, Counties Power Consumer Trust, ENA, Entrust, Northern Federated Farmers, Northpower, Top Energy, Trustpower, Vector	The two experts that commented on the inclusion of DER in the capacity assessment for the residual charge disagreed that it was appropriate.

Residual: line or transformer capacity not used to calculate residual

No.	Submitter	Submissions
360.	Covec, Counties Power, Counties Power Consumer Trust, ENA, Entrust, Northern Federated Farmers, Northpower, Top Energy, Trustpower, Vector	Experts were generally against the proposition that the default allocation method for the AoB charge and the allocation method for the residual charge should be based on fixed capacity.
361.	Oji Fibre Solutions, Pacific Aluminium, New Zealand Aluminium Smelter, Nova Energy, Meridian Energy	Agree that the residual should not be allocated on the basis of transformer capacity or line capacity.

Residual: calculation of residual charge must seek to avoid double-counting and other charging anomalies

No.	Submitter	Submissions
362.	Meridian Energy	Support the proposed refinement.
363.	Transpower	The guidelines do not match the supplementary consultation paper, which requires that Transpower must "seek" to avoid double-charging and other charging anomalies.
364.	Transpower	The proposed refinement addresses a problem that is specific to the Authority's modelling, and is therefore not necessary.
365.	Orion	The proposed refinement may be difficult to achieve. The problem at which it is directed is a fundamental one, and may not be able to be rectified by a tweak to the guidelines.

No.	Submitter	Submissions
366.	PwC, Alpine Energy, Aurora Energy, EA Networks, Eastland Network, Electra, Mainpower, Marlborough Lines, Nelson Electricity, Network Tasman, Northpower, The Lines Company, Top Energy, Waipa Networks, Westpower	The proposed refinement should be amended to state that the residual charge must avoid "double-counting and outcomes that a reasonable person would consider to be anomalous or unjustified and that do not meet the Authority's statutory objective".
367.	Transpower	The proposed refinement should be qualified by the words "to the extent reasonably practicable" (or similar) to avoid additional complexity.
368.	Transpower	The proposed refinement should be subject to the practicability rider.
369.	EA Networks, Axiom for Transpower, PwC, Alpine Energy, Aurora Energy, Eastland Network, Electra, Mainpower, Marlborough Lines, Nelson Electricity, Network Tasman, Northpower, The Lines Company, Top Energy, Waipa Networks, Westpower	The proposed refinement will not address problems, because the proposal is too vague and subjective.
370.	Westpower	The refinement resolves Westpower's concerns about double-counting of the after-diversity demand figure at Westpower's Reefton GXP.

Residual: calculation of the residual charge must result in broadly equivalent charges to customers that are in broadly equivalent circumstances

No.	Submitter	Submissions
371.	Transpower	If it is included, the proposed refinement should be qualified by the words "to the extent reasonably practicable" (or similar) to avoid additional complexity.
372.	Meridian Energy	Support the proposed refinement.

No.	Submitter	Submissions
373.	Transpower, Axiom for Transpower, PwC, Alpine Energy, Aurora Energy, EA Networks, Eastland Network, Electra, Mainpower, Marlborough Lines, Nelson Electricity, Network Tasman, Northpower, The Lines Company, Top Energy, Waipa Networks, Westpower	The proposed refinement is too vague, and the effect of the proposed refinement will depend on how "broadly equivalent" is interpreted. Charges that are broadly equivalent in some circumstances will fail to be broadly equivalent in other circumstances.
374.	Orion	The proposed refinement may not align well with the other criteria for the residual.

Residual charge: other

No.	Submitter	Submissions
375.	NZ Steel	The Authority needs to account for co-generation being netted off load.
376.	Nova	Agree that the residual should be a separate charge, and not a surcharge on the AoB charge.
377.	Pioneer Energy, Otago Chamber of Commerce, Pacific Aluminium, New Zealand Aluminium Smelter, Orion	Agree with a principles-based approach for calculating the residual charge.
378.	Transpower, Orion	Clause 33 of the guidelines, which requires that the method for calculating the residual charge must be historical AMD or another method, is redundant and should be deleted.
379.	Transpower	In clause 32 of the guidelines, the word "calculating" should be replaced with "allocating".
380.	Pioneer Energy, Otago Chamber of Commerce	Making the residual charge unavoidable dilutes natural competition for transmission services.
381.	CEC for Trustpower	NERA for Meridian uses Coase's paper to support a two-part tariff. However, Coase's arguments are applicable only where costs can be attributed, and as such are not of assistance in relation to the shared network.
382.	Orion	Support a principles-based approach to the guidelines, but Transpower may struggle to devise a TPM that complies with all of them.

No.	Submitter	Submissions
383.	Oji Fibre Solutions, NZ Steel	The allocation method for the residual should recognise load diversity at peak times. Oji Fibre Solutions submitted that, as a result, peak charging should be used.
384.	Pacific Aluminium, New Zealand Aluminium Smelter	The Authority should clarify how the different transitional provisions in the residual work together. For instance, clause 11 of the guidelines should be clarified to reflect that it is not intended to prevent Transpower from applying a 3 year time constraint on any transition mechanism under clause 52 of the guidelines or any decision to include further assets as eligible investments under clause 53 of the guidelines.
385.	Oji Fibre Solutions	The Authority's proposed guidelines for allocating the residual give smaller consumers, who are connected to a distributor, a significant advantage over larger consumers. The guidelines should not create incentives for direct connect customers to become embedded customers, or vice versa.
386.	Top Energy, Ngawha Generation, PowerNet	The residual charge should be net of any material distributed generation commissioned or committed to at the time that the TPM guidelines are published. This would be more service-reflective.
387.	Venture Southland, Awarua Synergy, Dongwha, EIS, E-Type Engineering, HW Richardson Group, Southland Chamber of Commerce, South Port, Sarah Dowie MP, Southland District Council, Southland Manufacturers Trust, Southland Mayoral Forum, Todd Barclay MP, Invercargill City Council, Gore District Council, Grey Power Southland, Export Southland, Otago Southland Employers' Association, Port Otago, Queenstown Lakes District Council, Dunedin City Council, Clutha District Council, University of Otago, Pacific Aluminium, New Zealand Aluminium Smelter, Fonterra	The costs that are recovered through the residual charge should be minimised as much as possible.

No.	Submitter	Submissions
388.	Venture Southland, Awarua Synergy, Dongwha, EIS, E-Type Engineering, HW Richardson Group, Southland Chamber of Commerce, South Port, Sarah Dowie MP, Southland District Council, Southland Manufacturers Trust, Southland Mayoral Forum, Todd Barclay MP, Invercargill City Council, Gore District Council, Grey Power Southland, Export Southland, Otago Southland Employers' Association, Port Otago, Queenstown Lakes District Council, Dunedin City Council, Clutha District Council, University of Otago	The costs that make up the residual should be itemised in a way that is clear enough for customers to understand. This will ensure that the residual does not recover costs that should be recovered through the AoB charge, and that one group of consumers does not end up subsidising another.
389.	PwC, Alpine Energy, Aurora Energy, EA Networks, Eastland Network, Electra, Mainpower, Marlborough Lines, Nelson Electricity, Network Tasman, Northpower, The Lines Company, Top Energy, Waipa Networks, Westpower	The criteria for the residual charge may conflict with each other. This could create other anomalies. A similar problem has already been seen in relation to the distribution pricing principles.
390.	MEUG, Fonterra, Oji Fibre Solutions, Winstone Pulp International	The criteria for the residual charge should require Transpower to consider the effect on end consumers (for example, by adding "and end consumers" after "designated transmission customers" in each place in clause 32 of the guidelines).
391.	IEGA, NZ Energy, Pioneer Energy, Otago Chamber of Commerce	The guidelines should require that the method for allocating the residual applies across all types of transmission customers and does not allow for arbitrary adjustments.
392.	Axiom for Transpower	The residual charge may result in distortions and be seen as unfair. There would be a risk that customers would inefficiently change their conduct in response. The significant wealth redistributions that would occur under the proposed residual charge might be viewed by customers as inequitable and a form of "hold up".

No.	Submitter	Submissions
393.	Pacific Aluminium, New Zealand Aluminium Smelter, Oji Fibre Solutions, Winstone Pulp, Business NZ, Canterbury Employers' Chamber of Commerce, Business Central, Transpower	The residual has been designed to be unavoidable. It should minimise inefficient avoidance of charges that would not be cost-reflective, but at the same time not discourage efficient consumption decisions.
394.	Fonterra	The residual is inconsistent with what the Authority is trying to achieve, because it is not cost-reflective or service-based.
395.	Pacific Aluminium, New Zealand Aluminium Smelter	The residual is too large, which will necessarily be distortionary. Accordingly, the residual should be minimised, and charged for in the least distortionary way possible. Customers with peaky loads and those far from generation should pay a higher rate per MWh.
396.	Business NZ, Canterbury Employers' Chamber of Commerce, Business Central	The residual should be allocated in a way that minimises its short-term impact on the use of the interconnected grid and the operation of the electricity industry; and avoids creating incentives for inefficient investment in the interconnected grid and inefficient investment by grid users.
397.	PwC, Alpine Energy, Aurora Energy, EA Networks, Eastland Network, Electra, Mainpower, Marlborough Lines, Nelson Electricity, Network Tasman, Northpower, The Lines Company, Top Energy, Waipa Networks, Westpower	The start of the measurement period for the residual should be delayed to align with the proposed 2020 transition to the new TPM.
398.	Oji Fibre Solutions	The TPM should incentivise parties to adopt more efficient non-transmission alternatives including demand response and generation options. Accordingly, the tax-like methodology for the residual is inappropriate.
399.	MEUG, Fonterra, Oji Fibre Solutions, Winstone Pulp International	There should be greater transparency of the makeup of the residual. This could be achieved by amending clause 4 of the guidelines.
400.	MEUG, Fonterra, Oji Fibre Solutions, Winstone Pulp International, Norske Skog	The Authority should require Transpower to actively seek to minimise the size of the residual over time.
401.	Pacific Aluminium, New Zealand Aluminium Smelter	Transpower should be required to publish a breakdown of the elements that make up the residual charge every year, as well as an annual 5 year forecast of TPM charges showing the breakdown of the residual.

No.	Submitter	Submissions
402.	Business NZ, Canterbury Employers' Chamber of Commerce, Business Central	Transpower should be transparent about what costs are allocated to the residual. This includes identifying common costs allocated to the residual.
403.	Pacific Aluminium, New Zealand Aluminium Smelter	Transpower should have broad discretion to develop the residual, guided by clear principles.

Charges for large consumers tied to consumer (paragraphs 3.138–3.146)

No.	Submitter	Submissions
404.	NZ Steel	While the aim of the Authority is understandable, it is astonishing that the Authority has the mandate to dictate terms to Transpower that penalise businesses for exercising legitimate commercial decisions.
405.	PwC, Alpine Energy, Aurora Energy, EA Networks, Eastland Network, Electra, Mainpower, Marlborough Lines, Nelson Electricity, Network Tasman, Northpower, The Lines Company, Top Energy, Waipa Networks, Westpower	A large customer's charges under the new TPM will be determined in part by decisions made by its distributor. This may lead to perverse outcomes under the proposed refinement if the large consumer then connects directly to the grid.
406.	Transpower	Clause 35 of the guidelines is in a part of the guidelines that relates to the residual charge, but clause 35 also covers the AoB charge. Clause 35 should be moved to somewhere else in the guidelines.
407.	Transpower	It is not clear why clause 36 of the guidelines is required. It is not clear what anomalous result it is trying to avoid.
408.	Pacific Aluminium, New Zealand Aluminium Smelter, Meridian Energy	Support the proposed refinement.

No.	Submitter	Submissions
409.	Transpower	The proposed refinement is too prescriptive. Transpower is unlikely to have reliable information for embedded consumers, and may not know when an embedded consumer has connected to a different distributor. The load profile of an embedded consumer may change if they connect to a different distributor, such that their previous load is not a valid comparator. Clause 35 of the guidelines assumes that Transpower will have allocated AoB and residual charges to embedded consumers. This is not the case because they are not designated transmission customers. The relevance of previous and future load will depend on the final design of the AoB and residual charges. Some load may not be relevant at all. The proposed refinement does not explain what a large consumer is, does not deal with changes in the connection status of generators and networks, and overlaps with clause 24 of the guidelines. Transpower has suggested alternative wording for the clause.
410.	PwC, Alpine Energy, Aurora Energy, EA Networks, Eastland Network, Electra, Mainpower, Marlborough Lines, Nelson Electricity, Network Tasman, Northpower, The Lines Company, Top Energy, Waipa Networks, Westpower	The proposed refinement may not be practical, as it could require Transpower to track large customers and their costs.
411.	Transpower, Orion	The proposed refinement would be problematic when a large customer connects directly to the grid or switches from one EDB to another. That is because the amount that can be attributed to the customer will be unknown.

LRMC charge (paragraphs 3.147–3.158)

LRMC charge: TPM must specify method to adjust other charges to take into account revenue recovered by the LRMC charge

No.	Submitter	Submissions
412.	Meridian Energy, NERA for Meridian, Business NZ, Canterbury Employers' Chamber of Commerce, Business Central, Counties Power, Counties Power Consumer Trust	LRMC charges should be offset by reduced AoB charges, to avoid over-recovery/double counting.

No.	Submitter	Submissions
413.	NERA for Meridian Energy	One way to offset the LRMC charge by reduced AoB charges would be to keep track of the LRMC charges on the congested asset and reduce the AoB charge on it by the amount of LRMC prefunding once the new asset is built. This would result in Transpower earning its MAR, correct price signals, and would prevent over-recovery.
414.	Transpower, Meridian Energy, Pacific Aluminium, New Zealand Aluminium Smelter, NERA for Meridian, Business NZ, Canterbury Employers' Chamber of Commerce, Business Central, Counties Power, Counties Power Consumer Trust	Support the proposed refinement.
415.	Transpower	The guidelines should not presume that revenue from LRMC charges should be netted off the residual. The proposed refinement would avoid over-recovery.

LRMC charge: charge must complement or augment, but not duplicate, price signals provided by nodal pricing, other transmission charges and any grid support arrangements relied on by Transpower to efficiently defer transmission investment

No.	Submitter	Submissions
416.	Meridian Energy	Support the proposed refinement.

LRMC charge: charge may only be included if a price signal is required over and above the price signal provided by nodal pricing, other transmission charges, and any grid support arrangements relied on by Transpower to efficiently defer transmission investment

No.	Submitter	Submissions
417.	EA Networks	The suggestion that Transpower propose an LRMC charge if it believes that an additional price signal is required overlooks the fact that the existing RCPD charge could achieve the same thing with less cost, disruption, and uncertainty.
418.	Meridian Energy	Support the proposed refinement.

No.	Submitter	Submissions
419.	Transpower	Clauses 48 and 49 of the guidelines should be removed. It is unclear why they have been included. It appears that the Authority is loading the guidelines with reasons to reject the LRMC charge if Transpower proposes it, which is inappropriate. If clauses 48 and 49 of the guidelines are retained, the references to grid support arrangements in the clauses should be removed and the reference in clause 49 to refinements to the spot electricity market should be removed as they are outside Transpower's control, and may not happen.

LRMC charge: whether charge should be an additional component

No.	Submitter	Submissions
420.	Axiom for Transpower, EA Networks, Transpower	If the LRMC charge remained an additional component, Transpower might not implement an LRMC charge given negative commentary from the Authority on the LRMC charge.
421.	Transpower	Making the LRMC charge an additional component may give rise to unintended consequences. These include the risk that an LRMC charge is not proposed, prioritised or accepted into the final TPM, given Transpower's need to prioritise and because the Authority is unduly critical and unlikely to be receptive to an LRMC proposal, potentially increasing risks and costs; regulatory uncertainty; and disruptions to the distribution pricing regime.
422.	Pacific Aluminium, New Zealand Aluminium Smelter	Support the inclusion of an LRMC charge as an additional component.
423.	Transpower	The cost and risk of making LRMC a mandatory component is small, but the cost and risk of leaving it as an additional component is very high, and can be mitigated.

No.	Submitter	Submissions
424.	Transpower, Buller Electricity, Axiom for Transpower, ENA, Alpine Energy, Aurora Energy, Eastland Network, Electra, EA Networks, Horizon Energy Distribution, Mainpower, Marlborough Lines, Nelson Electricity, Network Tasman, Network Waitaki, Northpower, Orion, Powerco, PowerNet, Scan Power, The Lines Company, Top Energy, Unison, Vector, Waipa Networks, WEL Networks, Wellington Electricity Lines, Westpower, Counties Power, Counties Power Consumer Trust	The LRMC charge should be a core charge, not an additional component.
425.	ENA, Alpine Energy, Aurora Energy, Buller Electricity, Counties Power, Eastland Network, Electra, EA Networks, Horizon Energy Distribution, Mainpower, Marlborough Lines, Nelson Electricity, Network Tasman, Network Waitaki, Northpower, Orion, Powerco, PowerNet, Scan Power, The Lines Company, Top Energy, Unison, Vector, Waipa Networks, WEL Networks, Wellington Electricity Lines, Westpower, Transpower	The need for an LRMC charge has already been demonstrated by the Authority in the LRMC working paper.

LRMC charge: other

No.	Submitter	Submissions
426.	Axiom for Transpower	A strength of LRMC is that parties can decide for themselves how to act, as opposed to Transpower needing to estimate each party's private benefits.

No.	Submitter	Submissions
427.	Counties Power, Counties Power Consumer Trust, ENA, Alpine Energy, Aurora Energy, Buller Electricity, Eastland Network, Electra, EA Networks, Horizon Energy Distribution, Mainpower, Marlborough Lines, Nelson Electricity, Network Tasman, Network Waitaki, Northpower, Orion, PowerNet, Scan Power, The Lines Company, Top Energy, Unison, Vector, Waipa Networks, WEL Networks, Wellington Electricity Lines, Westpower, Nova, Transpower, Axiom for Transpower, IEGA, NZ Energy, Pioneer Energy, Otago Chamber of Commerce, Oji Fibre Solutions, Powerco	An LRMC charge (or equivalent) is necessary to provide a forward-looking price signal. The AoB charge does not provide that price signal.
428.	Houston Kemp for Trustpower	The Authority's description of an LRMC charge as a measure of opportunity cost is inaccurate.
429.	Pacific Aluminium, New Zealand Aluminium Smelter	The LRMC charge should be designed so as to avoid transmission investments being prioritised over generation investments.
430.	Pioneer Energy, Otago Chamber of Commerce	The LRMC charge should be allocated at the interconnection level, not the GXP level. This would provide parties with more certainty.
431.	Pioneer Energy, Otago Chamber of Commerce	The LRMC charge would provide forward-looking signals, manage peak demand and provide location signals.
432.	Transpower	Agree with the Authority's conclusions in the LRMC working paper that LRMC is: forward looking; preferred under the Authority's DME framework; likely to be more efficient than a beneficiaries-pay charge; and could be implemented as a market-like charge by a range of practical methods. The Authority's approach in the LRMC working paper is orthodox and fundamentally sound. The practicality issues identified in the LRMC working paper are overstated and can be overcome.
433.	Transpower	If the Authority has already made up its mind that the LRMC charge is undesirable, it should not be included in the guidelines, even as an additional component.

No.	Submitter	Submissions
434.	Transpower	Not having an RCPD-based or LRMC charge could affect demand response. Even a small change in demand response could significantly impact reliability, system security, and consumer prices.
435.	Axiom for Transpower, Counties Power, Counties Power Consumer Trust	The Authority has prioritised AoB over LRMC despite LRMC sitting higher on its DME framework. This is counterintuitive.
436.	Axiom for Transpower	The Authority is concerned that the LRMC charge would be highly volatile, highly inaccurate and complex. However, these problems are dependent on the design of the charge and could be avoided designing the charge differently (for example, by applying it to broader areas).
437.	Transpower	The Authority needs to consider the impact of emerging technologies. One implication of emerging technologies is that a peak-based charge has the potential to avoid (not just defer) new investments. Therefore, a peak-usage or LRMC charge becomes more important.
438.	Axiom for Transpower	The Authority's consultation documents are inconsistent regarding the basic economic principles underpinning LRMC pricing. It is unclear why the Authority no longer views LRMC as a forward-looking price signal for future investments. The Authority's position on this matter is economically unorthodox.
439.	Transpower	The only constraint on the LRMC charge should be that nodal pricing should be taken into account.
440.	Transpower	The reference to "grid support arrangements" in clause 47(d)(ii) of the guidelines should be removed. Grid support arrangements should supplement the LRMC charge, not the other way around. Grid support arrangements are an administrative approach to managing grid capacity and should not be preferred to market-like approaches such as LRMC.

Prudent discount policy (paragraphs 3.159–3.173)

PDP: PDP would not apply to inefficient exit

No.	Submitter	Submissions
441.	Meridian Energy	Do not support the proposed refinement. The extension of the inefficient exit component is economically sound, would have benefits, and the risks of gaming can be addressed in the design of the charge.
442.	Genesis Energy, Castalia for Genesis, Fonterra, Mercury, PwC, Alpine Energy, Aurora Energy, EA Networks, Eastland Network, Electra, Mainpower, Marlborough Lines, Nelson Electricity, Network Tasman, Northpower, The Lines Company, Top Energy, Waipa Networks, Westpower, Ngawha Generation, Transpower, Oji Fibre Solutions, Todd Barclay MP	It is good that the PDP will not apply to inefficient exit.
443.	NZ Steel	It is surprising that the Authority has removed the inefficient exit component. Parties requested clarification of this component, not its removal.
444.	NERA for Meridian Energy	It is too early to definitively exclude the inefficient exit component. Transpower should do further work about whether the gaming and competition problems could be mitigated.
445.	NZ Steel	NZ Steel may need a bespoke PDP, irrespective of the guidelines. NZ Steel may otherwise discontinue steelmaking in New Zealand.
446.	Nova	The inefficient exit component should be retained, but PDP applications under the component should be assessed by a panel of independent arbitrators.
447.	Top Energy, Ngawha Generation, Todd Barclay MP	The inefficient exit component was a subsidy.
448.	Pacific Aluminium, New Zealand Aluminium Smelter	The inefficient exit component will be needed if there is a large residual or a transition.
449.	Castalia for Genesis	The inefficient exit component would have: been costly; unfairly advantaged some businesses; and compromised durability.

No.	Submitter	Submissions
450.	Genesis Energy	The inefficient exit component would have created inefficiencies and would not have aligned with the Authority's statutory objective.

PDP: no PDP for distributors with customers that face charges exceeding standalone costs for delivering electricity to it

No.	Submitter	Submissions
451.	Pacific Aluminium, New Zealand Aluminium Smelter, Venture Southland, Awarua Synergy, Dongwha, EIS, E-Type Engineering, HW Richardson Group, Southland Chamber of Commerce, South Port, Sarah Dowie MP, Southland District Council, Southland Manufacturers Trust, Southland Mayoral Forum, Todd Barclay MP, Invercargill City Council, Gore District Council, Grey Power Southland, Export Southland, Otago Southland Employers' Association, Port Otago, Queenstown Lakes District Council, Dunedin City Council, Clutha District Council, Business NZ, Canterbury Employers' Chamber of Commerce, Business Central	It is good that the Authority has retained the "standalone cost" component of the PDP.
452.	Transpower	Support the proposed refinement.

PDP: distributors no longer to build generation to qualify for a prudent discount when it is privately beneficial but not efficient to bypass the grid

No.	Submitter	Submissions
453.	Transpower	Support the proposed refinement.

PDP: other

No.	Submitter	Submissions
454.	ENA, Alpine Energy, Aurora Energy, Buller Electricity, Eastland Network, Electra, EA Networks, Horizon Energy Distribution, Mainpower, Marlborough Lines, Nelson Electricity, Network Tasman, Network Waitaki, Northpower, Orion, Powerco, PowerNet, Scan Power, The Lines Company, Top Energy, Unison, Vector, Waipa Networks, WEL Networks, Wellington Electricity Lines, Westpower, Counties Power, Counties Power Consumer Trust, Business NZ, Canterbury Employers' Chamber of Commerce, Business Central, Auckland Airport	Support the Authority's proposed changes to the prudent discount policy.
455.	Transpower	The term of a prudent discount should be agreed by the parties. Making the life of the asset the default term is not appropriate, because it effectively forces Transpower into very long-term agreements unless the customer decides otherwise.
456.	Pacific Aluminium, New Zealand Aluminium Smelter	The Transpower needs to take a pragmatic approach to defining the requirements to determine the standalone cost.
457.	Castalia for Genesis	The PDP should apply to generators, who may have incentives to bypass the grid.

Maintaining competitive neutrality between grid-connected generation, DG and DR (paragraphs 3.174–3.178)

No.	Submitter	Submissions
458.	Houston Kemp for Trustpower	"Competitive neutrality" is not a precisely defined term in economics. Therefore, it is not clear: what the practical consequences of the refinement will be; whether the refinement will achieve the Authority's goal; and how the clause will be interpreted.

No.	Submitter	Submissions
459.	Nova	Clause 4(d) of the guidelines should be amended to refer to "new" grid-connected generation and "new" distributed generation. This will avoid penalising existing investments and arrangements, while sending the appropriate pricing signals for new investments.
460.	Transpower	Do not support the proposed refinement. It should be removed. The competitive neutrality of distributed generation and demand response is not only (or even mostly) a function of the TPM.
461.	Nova	It is not clear how the proposed refinement could be implemented without penalising existing investments. The Authority's modelling gives some indication at a high level, but fails to capture the complexity of arrangements at the distribution level. For example, the Authority's modelling of the impact of its proposals refers to "TODD", when the arrangements in question belong to five different legal entities, each with its own connection and supply arrangements.
462.	Meridian Energy	Support the proposed refinement, but suggest that the guidelines should also clearly state the objectives of the new TPM and its components.
463.	Pacific Aluminium, New Zealand Aluminium Smelter, Meridian Energy	Support the proposed refinement.
464.	PwC, Alpine Energy, Aurora Energy, EA Networks, Eastland Network, Electra, Mainpower, Marlborough Lines, Nelson Electricity, Network Tasman, Northpower, The Lines Company, Top Energy, Waipa Networks, Westpower	The proposed refinement would not have any practical impact, so may not be required.

Cap on transmission charges (3.179–3.201)

Cap: application of cap to transmission charges

No.	Submitter	Submissions
465.	PwC, Alpine Energy, Aurora Energy, EA Networks, Eastland Network, Electra, Mainpower, Marlborough Lines, Nelson Electricity, Network Tasman, Northpower, The Lines Company, Top Energy, Waipa Networks, Westpower	In order to have a meaningful impact, the cap should apply to transmission charges, not to the total retail bill.
466.	Business NZ, Canterbury Employers' Chamber of Commerce, Business Central	It seems unusual to impose a price cap on transmission costs that is relative to total energy costs.
467.	Counties Power, Counties Power Consumer Trust	The cap should apply to transmission charges only, for simplicity.
468.	Meridian Energy	The cap should apply to transmission charges only. Including other charges (for example, energy charges) in the base value for the cap indemnifies consumers against a variety of cost increases that are unrelated to transmission.
469.	Genesis Energy, Castalia for Genesis	The cap should apply to transmission charges only. This will: improve certainty and fairness; target the cap on the direct effects of the policy change; and make it easier to design the charge.
470.	Pacific Aluminium, New Zealand Aluminium Smelter	The cap should apply to transmission charges, not total electricity bills. This would avoid unintended consequences, including capping energy charges that would otherwise be determined in a competitive market.
471.	EA Networks	The only way a price cap would have the desired effect is if it is limited to the transmission component, and covers the whole TPM. However, even such a cap would ultimately lead to sharp price increases.

Cap: complexity of cap

No.	Submitter	Submissions
472.	Transpower	In order to implement the price cap, Transpower would be required to know the Commission's default and individual price path reset decisions. This means that it would need to calculate the cap in a one-month window after November 2019. There would be additional complexity and estimation in relation to the cap with a April 2020 implementation date.
473.	Northpower	It is not clear how the price cap would work in practice. Cost-reflective pass-through of transmission charges would not translate to a constant percentage across all consumer groups. For example, large industrial sites connect to the high voltage portions of distributors' networks. As a result, a higher portion of large industrial consumers' electricity costs can be attributed to transmission than residential consumers' costs, who connect to the low voltage portions of distributors' networks.
474.	Meridian Energy	The cap is difficult to understand and is subject to many exceptions and extensions. There is no clear end point for the cap. The guidelines should state governing principles for the cap and leave the detail to Transpower.
475.	PwC, Alpine Energy, Aurora Energy, EA Networks, Eastland Network, Electra, Mainpower, Marlborough Lines, Nelson Electricity, Network Tasman, Northpower, The Lines Company, Top Energy, Waipa Networks, Westpower, Transpower, Ngawha Generation	The cap is unworkable/difficult to apply/too complex because it relies on Transpower being aware of information it may not have access to (for example, the total retail bill of all consumers at a network level, the total annual retail bills for all customers at the time it sets prices, pricing information for EDBs, and the impact of the Commerce Commission's price reset).
476.	Nova	The price cap introduces unnecessary complexity, for very little benefit. The price cap appears to be a way to offset the removal of PDP for grid-connected load, but that problem would be better addressed by withdrawing the PDP over a period of 3-5 years.
477.	Oji Fibre Solutions	The price cap is complex and impractical, and will promote inefficient outcomes. For example, the price cap: will create a number of complexities; raises a number of questions as to what will and won't be taken into account; and may create incentives that the Authority has not modelled.

No.	Submitter	Submissions
478.	Transpower	The complexity of the cap could increase implementation costs.
479.	EA Networks	The price cap is unworkable because it incorrectly assumes all other components of a customer's total electricity bill will change at the same rate as the CPI. This would make the price cap difficult for Transpower to administer, because Transpower would need to make major price adjustments to cater for fluctuations in energy prices.
480.	EA Networks	The price cap is unworkable because the cap would not bind if Transpower introduced additional components.
481.	Northpower	The price cap makes the Authority's proposals more complex, without giving consumers any confidence about the net impact of the Authority's proposals on what they have to pay.
482.	Transpower	The price cap provisions are too complex because they require Transpower to calculate the incremental cost of supply to each customer to which the cap could apply.
483.	Transpower	Transpower has tried to apply the price cap and it is very difficult to apply in practice. There are information, sequencing, and other practical issues for which Transpower could not find an obvious solution.
484.	Transpower	Transpower would not be able to apply the price cap with a sensible level of objectivity or precision, and as such Transpower would be subject to criticism and potential legal challenge on a regular basis. The price cap is therefore not durable. The price cap should be deleted or redrafted as a straightforward cap on year-on-year transmission charge increases.

Cap: alternative transitional mechanisms to a cap

No.	Submitter	Submissions
485.	ENA, Alpine Energy, Aurora Energy, Buller Electricity, Counties Power, Eastland Network, Electra, EA Networks, Horizon Energy Distribution, Mainpower, Marlborough Lines, Nelson Electricity, Network Tasman, Network Waitaki, Northpower, Orion, Powerco, PowerNet, Scan Power, The Lines Company, Top Energy, Unison, Vector, Waipa Networks, WEL Networks, Wellington Electricity Lines, Westpower	A good transition would be to amend the existing RCPD charge to give more suitable locational price signal, develop and introduce AoB, develop and transition the residual charge as a postage stamp charge, develop and introduce LRMC, remove RCPD, and then adjust AoB if necessary.
486.	ENA, Alpine Energy, Aurora Energy, Buller Electricity, Counties Power, Eastland Network, Electra, EA Networks, Horizon Energy Distribution, Mainpower, Marlborough Lines, Nelson Electricity, Network Tasman, Network Waitaki, Northpower, Orion, Powerco, PowerNet, Scan Power, The Lines Company, Top Energy, Unison, Vector, Waipa Networks, WEL Networks, Wellington Electricity Lines, Westpower	Any transition mechanism should cover changes to charges and the reallocation of sunk costs.
487.	Top Energy, Ngawha Generation	Support a staged introduction of a new TPM with price increases staggered over several years.
488.	Norske Skog	The appropriate transition mechanism will depend on the allocator for the residual. The Authority should wait until the TPM design has been finalised and accurate modelling has been completed before making a decision about the transition mechanism.

No.	Submitter	Submissions
489.	Transpower	The Authority should take a principles-based approach to transitional provisions. Potential approaches include: retaining the general transitional provision in clause 19 of the guidelines; applying a weighted average of the existing and new TPM during the transitional period; or applying a percentage cap to transmission charges (which would be consistent with the Commerce Commission's approach and simpler to implement).
490.	ENA, Alpine Energy, Aurora Energy, Buller Electricity, Counties Power, Eastland Network, Electra, EA Networks, Horizon Energy Distribution, Mainpower, Marlborough Lines, Nelson Electricity, Network Tasman, Network Waitaki, Northpower, Orion, Powerco, PowerNet, Scan Power, The Lines Company, Top Energy, Vector, Waipa Networks, WEL Networks, Wellington Electricity Lines, Westpower, Unison, Centralines	The guidelines should allow for a transition from the RCPD charge to the residual charge.
491.	Auckland Airport	To avoid retrospectively applying new charges to existing assets, the Authority should implement a transitional framework that combines the residual charge with the status quo interconnection charge, and apply AoB to new transmission assets only.

Cap: other

No.	Submitter	Submissions
492.	Business NZ, Canterbury Employers' Chamber of Commerce, Business Central	Calculation of the price cap is highly dependent on assumptions.

No.	Submitter	Submissions
493.	Transpower	Clauses 65 and 66 of the guidelines, which provide for Transpower to review the price cap, should be removed. The Authority has the role of assessing whether the price cap is "working". The guidelines should not include provisions about potential future changes to the TPM, and certainly not ones that would make the TPM inconsistent with other provisions in the guidelines. A proposed change to the TPM that contradicts the requirement in the guidelines for a price cap designed in a particular way may not be able to be progressed under the Code.
494.	NERA for Meridian Energy	Concerns regarding the cap about overuse of and over-investment in the grid are likely to have a limited impact because: the price cap would apply to load only; would only apply in respect of existing grid assets not new grid assets; and price signals are only sent by the AoB charge, not the residual.
495.	Employers and Manufacturers Association (Northern)	Despite the price cap, the proposed annual increases in transmission charges for the Upper North Island remain significant.
496.	Pacific Aluminium, New Zealand Aluminium Smelter, Otago Southland Employers' Association, Port Otago, Queenstown Lakes District Council, Southland Manufacturers Trust, Dunedin City Council, Clutha District Council, PowerNet, Oji Fibre Solutions	Do not support a price cap, as it would delay charges being service-based and cost-reflective.
497.	Oji Fibre Solutions	If a price cap is included in the guidelines, the methodology for the price cap should take into account load and generation in the preceding assessment period, including any reductions or small increases in load.
498.	Transpower	If Transpower made an error in estimating retail prices, the cap could be breached, for example, if Transpower's estimated pass-through was incorrect, or if AoB charges for generators had a greater impact on spot market prices than estimated.

No.	Submitter	Submissions
499.	Business NZ, Canterbury Employers' Chamber of Commerce, Business Central	In case the new TPM is not introduced in the 2019/20 pricing year, the clauses in the guidelines that refer to the price cap should be amended to identify years with reference to the year in which the new TPM takes effect (or similar).
500.	Orion	In clause 55 of the guidelines, "distributor's customers" should be replaced with "consumers supplied, directly or indirectly, from the distributor's network". This would avoid confusion and make it clear that the definition includes consumers supplied from secondary networks.
501.	Transpower	The price cap design appears to hardcode the implementation date of the new TPM. This may not be consistent with the Code, which requires the Authority to determine an implementation date after it determines the TPM and after consulting with Transpower.
502.	Fonterra, Westpower, Business NZ, Canterbury Employers' Chamber of Commerce, Business Central	Support the introduction of a price cap as a transition.
503.	Pacific Aluminium, New Zealand Aluminium Smelter	The Authority has failed to consider the impact of the cap on customers who have to pay inefficiently higher charges for a longer period as a result of the cap.
504.	Energy Trusts of New Zealand	The Authority has misrepresented the purpose and effect of the price cap by failing to adequately explain that Transpower is entitled to collect the MAR set by the Commerce Commission, and by implying that the price cap will restrain transmission revenues.
505.	Pacific Aluminium, New Zealand Aluminium Smelter	The Authority has not set out a rationale for proposing a transition mechanism for clause 52(a) of the guidelines.
506.	NZ Steel	The cap and PDP serve different purposes and should both be retained.
507.	Refining NZ	The cap could result in incentives for users such as the refinery becoming direct consumers. Distributors would need to increase charges to other consumers to ensure that large consumers are "compensated" at the same rate as direct consumers.

No.	Submitter	Submissions
508.	ENA, Alpine Energy, Aurora Energy, Buller Electricity, Eastland Network, Electra, EA Networks, Horizon Energy Distribution, Mainpower, Marlborough Lines, Nelson Electricity, Network Tasman, Network Waitaki, Northpower, Orion, Powerco, PowerNet, Scan Power, The Lines Company, Top Energy, Unison, Vector, Waipa Networks, WEL Networks, Wellington Electricity Lines, Westpower, Pioneer Energy, Otago Chamber of Commerce, Counties Power, Counties Power Consumer Trust	The cap is arbitrary and is likely to distort outcomes by shifting costs to others, impacting negatively on durability over time.
509.	NZ Steel	It is unclear how the cap would apply to a site such as NZ Steel, which includes co-generation.
510.	Genesis Energy, Castalia for Genesis	The cap should apply to all transmission customers, including generators. This would be fairer and would reflect the reality that generators will be greatly affected by pricing changes, and face heightened commercial risks from a lack of ability to pass through costs.
511.	Genesis Energy	The cap should be lower, to reduce the impact on end consumers. If this is not possible, the transition should be over a longer period.
512.	NZ Steel	The cap should run for five years initially and then ratchet up for 10 years, rather than the current seven. This would support long-term investment decisions.
513.	Counties Power, Counties Power Consumer Trust	The cap would send an incorrect price signal because direct consumers will see a bigger increase in costs than residential customers. Residential customers should pay more under cost-reflective pricing.
514.	Refining NZ	The introduction of a price cap is an improvement on the Authority's previous proposal.
515.	Unison, Centralines, Northpower	The price cap is unnecessary/meaningless because it would not result in meaningful changes to prices.
516.	Vector, Entrust	The price cap masks the real impact of the TPM reform, which is higher prices.

No.	Submitter	Submissions
517.	Refining NZ	The price cap needs to provide an equivalent rate of relief for large consumers, whether or not they connect directly to the grid. The current design of the price cap may incentivise large consumers to become direct consumers. Distributors could increase charges to other consumers on their networks, to ensure that large consumers are compensated at the same rate as direct consumers.
518.	Business NZ, Canterbury Employers' Chamber of Commerce, Business Central	The price cap of 3.5% of total costs may still allow for large price increases. However, a tighter price cap could prolong the transition period, and could place an unfair burden on those who subsidise others under the current TPM.
519.	Transpower	The price cap potentially undermines the effect of Commerce Commission determinations. The greater the reduction in prices as part of the Commerce Commission's Part 4 reset, the higher the increases in transmission charges that could arise. This could be seen as undermining the benefits to consumers from the Commerce Commission's operation of Part 4 of the Commerce Act.
520.	Vector, Entrust, Pioneer Energy, Otago Chamber of Commerce	The price cap relies on retailer pass-through, which may not happen.
521.	Trustpower, Houston Kemp for Trustpower	The price cap will not smooth charges. It will place a wedge between base charges and net charges so that the actual allowed rate of increase in prices may considerably exceed 3.5%. Instead, the transition should be applied to base charges, not net charges.
522.	Meridian Energy	The price cap will slow the introduction of cost-reflective and service-based charging, but may be necessary to smooth price jumps.
523.	Unison, Centralines	Do not support the price cap. The price cap would be costly to administer compared to its benefits.
524.	Transpower	The price cap would create uncertainty for customers.
525.	Norske Skog	The proposed price cap provides little comfort. The Authority's proposals are "death by a thousand cuts".
526.	Transpower	There are a number of compounding errors in the Authority's cap modelling. Transpower would be happy to brief the Authority on this analysis.

No.	Submitter	Submissions
527.	Genesis Energy, Castalia for Genesis, Transpower, Oji Fibre Solutions	Transitional provisions are desirable.
528.	EA Networks, Energy Trusts of New Zealand	Under the Authority's cap proposal, parties' transmission charges would increase if the transmission and distribution WACCs were to decrease. This would make the price cap meaningless.

Alternatives

Alternatives: charging for the HVDC link

No.	Submitter	Submissions
529.	Counties Power, Counties Power Consumer Trust	The charging method for the HVDC link should not be changed. The CBA identified only $14 million of benefit over 20 years, not accounting for the 210MW of additional South Island capacity that resulted from the change to the SIMI charge. The SIMI charge has had a positive effect.
530.	Unison, Centralines	In relation to the HVDC link, it cannot be of benefit to consumers to initiate huge wealth transfers for low efficiency gains. In contrast, the Commerce Commission sacrifices economic efficiency to achieve a wealth transfer outcome that would benefit consumers.
531.	Trustpower	The Authority has not made out its case for change from the status quo for the HVDC charge, as demonstrated by errors identified in the recently released HVDC workbook.
532.	Professor Yarrow for Trustpower	The HVDC link should be separately priced and not included in the interconnection pool. HVDC charges do not appear to be flawed in any obvious, major way. Treating the HVDC link separately would allow for greater transparency over investments in the HVDC link. Even if no such investments are contemplated, there is no justification for raising the costs of such an option.
533.	Trustpower, Houston Kemp for Trustpower	The removal of the HVDC charge will introduce additional costs into the electricity sector, and creates a large wealth transfer relative to speculative benefits. This would create regulatory uncertainty.

Alternatives: use of RCPD based charges

No.	Submitter	Submissions
534.	Business NZ, Canterbury Employers' Chamber of Commerce, Business Central	The RCPD price signal, while currently too strong, suppresses demand. Removing a locational price signal such as RCPD altogether could increase demand, and encourage inefficient investment.
535.	Covec, Counties Power, Counties Power Consumer Trust, ENA, Entrust, Northern Federated Farmers, Northpower, Top Energy, Trustpower, Vector	Experts generally disagreed with the Authority's decision to remove the RCPD charge.
536.	NZ Steel	RCPD would be service-based, cost-reflective, market oriented, and fairer. It would also reflect the investment importance of coincident demand for all customers.
537.	Northpower	The current RCPD signal may be too strong. However, removing or substantially weakening the existing RCPD signal will increase peak load by reducing distributors' incentives to use technology to manage peak loads (such as ripple control), and reducing large consumers' incentives to use load management tools.
538.	PwC, Alpine Energy, Aurora Energy, EA Networks, Eastland Network, Electra, Mainpower, Marlborough Lines, Nelson Electricity, Network Tasman, Northpower, The Lines Company, Top Energy, Waipa Networks, Westpower	The Authority has rejected submissions that removing the RCPD price signal would increase peak demand. The Concept modelling that was the basis of this conclusion is not certain enough to support the Authority's conclusion, and the Authority should seek more evidence on this point.
539.	ENA, Alpine Energy, Aurora Energy, Buller Electricity, Counties Power, Eastland Network, Electra, EA Networks, Horizon Energy Distribution, Mainpower, Marlborough Lines, Nelson Electricity, Network Tasman, Network Waitaki, Northpower, Powerco, PowerNet, Scan Power, The Lines Company, Top Energy, Unison, Vector, Waipa Networks, WEL Networks, Wellington Electricity Lines, Westpower, Orion	The RCPD-based interconnection charge provides a useful peak demand signal. It should not be removed unless it is replaced with another charge with a locational peak demand price signal (such as LRMC).

No.	Submitter	Submissions
540.	GBC Winstone	The TPM guidelines should provide for the use of RCPD-based charges and load management price signals. If these are not included in the TPM guidelines, perverse outcomes will result and these components will likely need to be reintroduced in the future.
541.	Oji Fibre Solutions	The current RCPD-based interconnection charge provides the necessary incentives to reduce congestion of the network at peak times, so that new grid investments can be efficiently deferred.

Alternatives: Transpower's simplified staged approach

No.	Submitter	Submissions
542.	IEGA, NZ Energy, Pioneer Energy, Otago Chamber of Commerce, Transpower, Mercury, Genesis Energy	Support the adoption/consideration of Transpower's simplified staged approach.
543.	Transpower	Transpower does not agree with the Authority's conclusion that adopting Transpower's proposal would be inconsistent with the DME framework and therefore would be easily challenged in the Courts. Transpower also does not agree that this would expose the Authority to legal challenge. In any case, Transpower's proposal is higher on the DME framework.

Alternatives: status quo

No.	Submitter	Submissions
544.	Oji Fibre Solutions	The Authority should investigate what improvements can be made to the current interconnection charge (which is fundamentally sound), and should consider the impact of any changes carefully.

No.	Submitter	Submissions
545.	PwC, Alpine Energy, Aurora Energy, EA Networks, Eastland Network, Marlborough Lines, Northpower, Top Energy, Westpower, Counties Power, Counties Power Consumer Trust, Unison, Centralines, ENA, Alpine Energy, Aurora Energy, Buller Electricity, Eastland Network, Electra, EA Networks, Horizon Energy Distribution, Mainpower, Marlborough Lines, Nelson Electricity, Network Tasman, Network Waitaki, Northpower, Orion, Powerco, PowerNet, Scan Power, The Lines Company, Vector, Waipa Networks, WEL Networks, Wellington Electricity Lines, Pioneer Energy, Otago Chamber of Commerce, Ngawha Generation, Trustpower, Employers and Manufacturers Association (Northern), NZ Steel, Bushnell/Wolak for Trustpower, Houston Kemp for Trustpower	The Authority should retain the status quo or an amended status quo under the current guidelines, for example, by amending the number of periods over which the interconnection charge is calculated, if the interconnection signal is too strong.
546.	Trustpower, Houston Kemp for Trustpower	The Electricity Commission's reasons for the current TPM guidelines, including practicability, stability, transaction costs, consistency and certainty, remain valid. The Commission regarded the status quo as an exacerbator-pays charge, which is therefore preferable to beneficiaries-pay charges in the Authority's hierarchy of charges. The current TPM guidelines could be updated to reflect legislative changes since the Electricity Commission developed them. Detailed changes are included as Appendix A of Trustpower's submission.
547.	Northpower	The status quo is well understood and has the lowest transaction costs.
548.	Trustpower, Houston Kemp for Trustpower	The status quo would rate higher on the DME framework than the Authority's proposal. However, the Authority has not carried out this assessment.

No.	Submitter	Submissions
549.	Trustpower, Bushnell/Wolak for Trustpower	The status quo would result in efficient transmission pricing. This is because: there is oversight by an independent agency; the process is informed (but not unduly swayed) by the claimed investment plans of industry participants; firms that require investments for their individual needs are responsible for financing those investments; charges for using the network include efficient congestion pricing methods such as locational pricing; and remaining capital costs are recovered through a form of Ramsey pricing.

Alternatives: other

No.	Submitter	Submissions
550.	Chris Henderson	The Authority should adopt a progressive/differential pricing approach, under which: • transmission costs would account for no more than 3% of an electricity bill, could be fixed, and would increase with reference to a cost of living index; and • transmission charges for the North Island and South Island would be the same, with an additional charge for an island that imports electricity from the other. That approach would incentivise: the reintroduction of ripple control; more targeted energy efficiency and conservation efforts; and increased use of low carbon means of generation. It would also reduce transmission losses, and would enable each island to be more self-reliant while still being able to use the national grid as a safety net.
551.	Contact Energy	The Authority should consider introducing an additional component for shared connection assets. That component should be consistent with the principles of beneficiaries-pay, and cost-reflective and service-based pricing.
552.	Auckland Chamber of Commerce	Transmission charges could be based on scale, and the volume of electricity transmitted. Because Auckland's electricity usage supports 36% of New Zealand's GDP, line charges for Auckland should be lower than for the rest of New Zealand. If Auckland's electricity was produced closer to Auckland, transmission costs for the rest of New Zealand would then need to increase substantially.

No.	Submitter	Submissions
553.	Trish Lawther via Entrust	Electricity companies should pay their shareholders smaller dividends.

Modelling (paragraphs 3.202–3.207, Appendix F)

No.	Submitter	Submissions
554.	Transpower	Concept's report applies a higher risk appetite than Transpower would apply. This results in a report that may be unduly optimistic.
555.	Transpower	Concept's report is caveated given uncertainties after 2018. This limits the evidential value of the analysis in the report.
556.	Transpower	Concept's report notes that participants would need to understand certain information. There is the possibility that transaction costs and information asymmetry and agency problems would weaken assumed incentives and corresponding behaviours. Many potential participants are small entities that do not have the existing capacity to analyse the information.
557.	Transpower	Concept's report takes an island or national perspective, which may not be appropriate.
558.	Transpower	Concept's report was sensitivity tested, but more extreme combinations of DR and DG non-response could potentially occur.
559.	MEUG, Fonterra, Oji Fibre Solutions, Winstone Pulp International	In developing the TPM, Transpower should be required to conduct a robust sensitivity test of any scenarios used in its modelling of charges.
560.	Energy Trusts of New Zealand	In its modelling, the Authority has assumed that the WACC reduction will apply to all distributors. However, the Commerce Commission only sets the WACC for 16 distributors.
561.	Energy Trusts of New Zealand	Indicative pricing is not robust. The Authority should instead present modelling that describes expected prices under its proposals in terms of dollar amounts "plus or minus x%".

No.	Submitter	Submissions
562.	PwC, Alpine Energy, Aurora Energy, EA Networks, Eastland Network, Electra, Mainpower, Marlborough Lines, Nelson Electricity, Network Tasman, Northpower, The Lines Company, Top Energy, Waipa Networks, Westpower	Little weight should be put on the Authority's modelling, given the high level of discretion given to Transpower in the Authority's proposal.
563.	Energy Trusts of New Zealand	The Authority has failed to account for some distributors' entitlement to continue to recover past foregone revenue as a result of factors such as the Commerce Commission's 10% cap for annual revenue increases.
564.	Buller Electricity	The Authority has made a number of allocator adjustments (for example, modifying selected GXPs to account for material changes in load, aggregating GXPs, and netting off cogeneration). The criteria for Transpower applying adjustments to specific GXPs is not clear, which makes charges difficult to predict.
565.	NZ Steel	The Authority has treated NZ Steel's Glenbrook site incorrectly. The Authority does not take into account the fact that NZ Steel usually does not purchase high-priced electricity and therefore does not benefit to the level calculated by the Authority.
566.	NZ Steel	The Authority should not have separated out Pacific Steel in the modelling.
567.	Northpower	The Authority's figures do not reconcile with Northpower's own analysis of the potential impact of the Authority's proposals on customers.
568.	Otago Chamber of Commerce	The Authority's indicative costings are unsatisfactory, because it might take a few years before the financial effects of the Authority's proposal are fully apparent.

No.	Submitter	Submissions
569.	IEGA, NZ Energy, Pioneer Energy, Otago Chamber of Commerce	The Authority's modelling arbitrarily reduces AMD volumes to take into account yet to be committed DG investment (including in relation to Top Energy, Norske Skog and NZ Steel). This shows that customers can avoid transmission charges by owning DG, while Transpower cannot make similar adjustments to other networks with similarly connected assets. The Authority has used a different test for DG than it has used under the DGPP reforms. Further, the adjustments result in charges that are similar to current RCPD charges. It is not clear how the Authority's adjustments are efficient when the Authority deems the current ACOT payment levels as a subsidy. While the modelled charges are indicative only, there is a concern that Transpower will be influenced by the Authority's indicative modelling.
570.	NZ Steel	The Authority's modelling has been based on questionable and complex assumptions, as a result of using historical figures to build a 2019 scenario as input to vSPD. This suggests that the TPM will not be durable.
571.	Trustpower, Houston Kemp for Trustpower	The Authority's modelling may not be compliant with the TPM guidelines.
572.	Trustpower, Houston Kemp for Trustpower, Norske Skog, IEGA, NZ Energy, Pioneer Energy, Otago Chamber of Commerce, MEUG, Fonterra, Oji Fibre Solutions, Winstone Pulp International	The Authority's modelling is highly sensitive to modelling inputs. Some submitters were of the view that this undermined the robustness of the modelling or created uncertainty.
573.	EA Networks, Northpower, Energy Trusts of New Zealand, Auckland Airport	The use of WACC-based modelling hides price increases.
574.	MEUG, Fonterra, Oji Fibre Solutions, Winstone Pulp International	The use of WACC-based modelling is confusing.

No.	Submitter	Submissions
575.	PwC, Alpine Energy, Aurora Energy, EA Networks, Eastland Network, Electra, Mainpower, Marlborough Lines, Nelson Electricity, Network Tasman, Northpower, The Lines Company, Top Energy, Waipa Networks, Westpower, Counties Power, Counties Power Consumer Trust, Unison, Centralines	The use of WACC-based modelling is deliberately misleading.
576.	PwC, Alpine Energy, Aurora Energy, Eastland Network, Electra, ENA, Alpine Energy, Aurora Energy, Buller Electricity, Counties Power, Eastland Network, Electra, EA Networks, Horizon Energy Distribution, Mainpower, Marlborough Lines, Nelson Electricity, Network Tasman, Network Waitaki, Northpower, Orion, Powerco, PowerNet, Scan Power, The Lines Company, Top Energy, Unison, Vector, Waipa Networks, WEL Networks, Wellington Electricity Lines, Westpower, Unison, Centralines	The use of WACC-based modelling is flawed, because it assumes that a WACC calculated in September 2016 would apply in 2020.
577.	Vector, Entrust, EA Networks, Employers and Manufacturers Association (Northern), MediaWorks, Northpower, Business NZ, Canterbury Employers' Chamber of Commerce, Business Central, Auckland Airport, Oji Fibre Solutions	The use of WACC-based modelling is inappropriate because movement in the WACC is highly speculative.

No.	Submitter	Submissions
578.	ENA, Alpine Energy, Aurora Energy, Buller Electricity, Eastland Network, Electra, EA Networks, Horizon Energy Distribution, Mainpower, Marlborough Lines, Nelson Electricity, Network Tasman, Network Waitaki, Northpower, Orion, Powerco, PowerNet, Scan Power, The Lines Company, Top Energy, Unison, Waipa Networks, WEL Networks, Wellington Electricity Lines, Westpower, Vector, Entrust, PwC, Counties Power, Counties Power Consumer Trust	The use of WACC-based modelling is irrelevant to the Authority's proposal/functions.
579.	MEUG, Fonterra, Oji Fibre Solutions, Winstone Pulp International, NZ Steel	The Authority's modelling inputs are not transparent enough.

CBA (chapter 4)

CBA: robustness of CBA

No.	Submitter	Submissions
580.	Trustpower	As a result of errors in OGW's modelling, the Authority must choose between either standing by OGW's modelling framework (and therefore accepting the revised NPV cost of changing the HVDC link is $113.5 million) or accepting that the modelling framework used to assess the removal of HVDC charges and the TPM proposal as a whole is not fit for purpose and therefore cannot be relied on. If the Authority chooses to rely on the $113.5 million cost figure, it must also apply consistent weightings to scenarios through its analysis. Using the revised $113.5 million cost figure would reduce net benefits by $127.3 million. Applying consistent weightings would reduce the net benefits by a further $85 million, which would result in a negative total net benefit.

No.	Submitter	Submissions
581.	Transpower, Axiom for Transpower, PwC, Alpine Energy, Aurora Energy, EA Networks, Eastland Network, Electra, Mainpower, Marlborough Lines, Nelson Electricity, Network Tasman, Northpower, The Lines Company, Top Energy, Waipa Networks, Westpower, Houston Kemp for Trustpower	OGW has not adequately responded to valid submitter concerns with the CBA.
582.	EA Networks	OGW's new report: concedes shortcomings; has poor defences to criticisms; and fails to consider key issues raised (including "the Huntly stays" scenario, end values, and constraints). Accordingly, OGW's CBA cannot be relied on.
583.	Meridian, NERA for Meridian	OGW's responses to issues in the CBA are generally reasonable and correct, and the CBA is informative and appropriate.
584.	Covec, Counties Power, Entrust, Northern Federated Farmers, Northpower, Top Energy, Trustpower, Vector, Counties Power Consumer Trust, ENA, Alpine Energy, Aurora Energy, Buller Electricity, Eastland Network, Electra, EA Networks, Horizon Energy Distribution, Mainpower, Marlborough Lines, Nelson Electricity, Network Tasman, Network Waitaki, Orion, Powerco, PowerNet, Scan Power, The Lines Company, Unison, Waipa Networks, WEL Networks, Wellington Electricity Lines, Westpower, Houston Kemp for Trustpower	The CBA does not robustly assess the costs, risks and benefits of the Authority's proposals.
585.	Trustpower, Houston Kemp for Trustpower	The CBA is unreliable, which raises questions about whether the Authority has made a genuine attempt to comply with its legal obligations to properly evaluate its reform proposals.

No.	Submitter	Submissions
586.	Trustpower, Huston Kemp for Trustpower	There are serious errors in the CBA, including: inadequate approaches for assessing the order, timing and costs of new generation; the assumption that the HVDC charge will be inefficient; an incorrect assessment of whether the HVDC charge could reduce total generation and network costs; the fact that the modelling analysis estimates $13.7 million of net costs, not net benefits; the understatement of fixed operating costs by a factor of one billion; and the application of the HVDC charge to a random selection of North and South Island generators rather than purely South Island generators. These errors have been highlighted by the information released by the Authority on 23 February 2017. These errors indicate that the Authority does not have a sound evidential foundation for including the HVDC assets in the AoB charge.
587.	Axiom for Transpower	Two omissions in the modelling (errors in relation to "Huntly stays" and "end values") would change the estimated net benefit by 99%. This striking result is symptomatic of deeper problems with the modelling in the CBA.

CBA: extent to which CBA reflects proposal

No.	Submitter	Submissions
588.	Houston Kemp for Trustpower	Houston Kemp previously submitted that the benefits estimated under the CBA are not solely attributable to the AoB charge. OGW responded that this is possible, but that OGW was asked only to undertake a CBA of the two options put forward by the Authority. This suggests that the CBA was not designed to identify the best option for transmission pricing, but to identify inefficiencies in the current TPM. The CBA is therefore not fit for purpose.
589.	Axiom for Transpower	OGW has defined the efficacy of the AoB charge by the extent to which it mimics a regional LRMC charge. This indicates that a regional LRMC charge should be implemented because the real thing would be superior to a "reasonable proxy".
590.	Houston Kemp for Trustpower	OGW has failed to respond to criticisms that the AoB charge would not: work perfectly; give rise to LRMC pricing; or be cost-reflective.

No.	Submitter	Submissions
591.	Houston Kemp for Trustpower	OGW's CBA is inadequate because it does not test whether the charges that could be developed under the guidelines would give rise to net benefits relative to potential alternatives. The CBA assumes outcomes consistent with efficient price signals, without showing that these benefits would be generated by the Authority's proposal. The AoB charge would send price signals that are different to those modelled by OGW (LRMC). In addition, OGW's CBA confuses prices and costs.
592.	Houston Kemp for Trustpower	The Authority defended the differences in potential benefits of a perfect locational price signal under OGW's CBA, and work carried out by the Electricity Commission in 2010, on the basis that the current TPM is different from the TPM in force at the time of the previous analysis. However, in both analyses the TPM in force at the time was modelled in the same way, so differences in the TPM do not explain differences in the modelling results. The Electricity Commission's work is relevant because it is measuring the same benefits addressed by the relevant part of OGW's CBA.
593.	ENA, Alpine Energy, Aurora Energy, Buller Electricity, Counties Power, Eastland Network, Electra, EA Networks, Horizon Energy Distribution, Mainpower, Marlborough Lines, Nelson Electricity, Network Tasman, Network Waitaki, Northpower, Orion, Powerco, PowerNet, Scan Power, The Lines Company, Top Energy, Unison, Vector, Waipa Networks, WEL Networks, Wellington Electricity Lines, Westpower, Mercury	The CBA is based on economic theory, not reality.

No.	Submitter	Submissions
594.	Axiom for Transpower	The CBA is based on the premise that the AoB charge would provide an efficient marginal price signal. That is not correct. Even if it were correct, the efficiency of the AoB charge would depend on the inclusion of the marginal price adjustment mechanism, which is an additional component and therefore might not be implemented. Without the marginal price adjustment component, the AoB charge would not be efficient.
595.	Entrust, Trustpower, Houston Kemp for Trustpower, ENA, Alpine Energy, Aurora Energy, Buller Electricity, Counties Power, Eastland Network, Electra, EA Networks, Horizon Energy Distribution, Mainpower, Marlborough Lines, Nelson Electricity, Network Tasman, Network Waitaki, Northpower, Orion, Powerco, PowerNet, Scan Power, The Lines Company, Top Energy, Unison, Vector, Waipa Networks, WEL Networks, Wellington Electricity Lines, Westpower	The CBA models a different TPM to the Authority's proposal.

CBA: comments on specific aspects of the CBA

No.	Submitter	Submissions
596.	PwC, Alpine Energy, Aurora Energy, EA Networks, Eastland Network, Electra, Mainpower, Marlborough Lines, Nelson Electricity, Network Tasman, Northpower, The Lines Company, Top Energy, Waipa Networks, Westpower	A new CBA would not be useful at this stage given the level of discretion given to Transpower.

No.	Submitter	Submissions
597.	Houston Kemp for Trustpower	Houston Kemp previously criticised OGW's CBA on the basis that the analysis of the costs of generation capacity expansion omitted fuel costs, fuel transport costs, and the cost of carbon emissions. OGW defended its CBA on the basis that it used MBIE data, which included fuel costs. However, the MBIE data was only used to determine the order of generation investments in the CBA, not the costs of those investments, for which OGW used a cash flow analysis. Houston Kemp's concerns regarding the cash flow analysis still stand.
598.	Houston Kemp for Trustpower	Houston Kemp previously submitted that a lower quantity demanded will increase deadweight loss. OGW's response was that reduced consumption at peak times may be more efficient because it would be more reflective of the underlying costs of supply. Houston Kemp agrees that reduced consumption at peak times can, in some circumstances, be more efficient where this avoids additional investment that is not economic. OGW has attempted to capture these benefits under the category "deterring additional investment in and use of substitutes for transmission". Reducing consumption will always result in reduced consumer surplus. This will give rise to net costs where prices are much higher than the marginal costs of supply, as they usually are in the supply of electricity.
599.	Houston Kemp for Trustpower	Houston Kemp previously submitted that implementation costs are vastly under-estimated. OGW is of the view that only the Authority and Transpower would incur upfront costs, and that ongoing costs would remain the same. This materially underestimates the complexity involved in implementing and being engaged with the AoB charge. The AoB charge imposes significant information and technical requirements on parties. OGW's response is therefore naïve.

No.	Submitter	Submissions
600.	Houston Kemp for Trustpower	Houston Kemp previously submitted that peak capacity availability is not modelled. OGW concedes that this was an error, but that the effects on the model's net benefits were diminished, given that it was an error in both scenarios. However, the error means that OGW does not have a robust methodology for determining the order of generation entry, so it cannot claim to robustly estimate the difference in costs between two potential scenarios for generation entry.
601.	Houston Kemp for Trustpower	Houston Kemp submitted that assumptions used by OGW in the CBA are not well supported by external sources, including the RCPD pricing, the assumption of rapid uptake of diesel generation and demand response, and the basis for assessing the costs of operating existing DG. OGW has not provided responses to these concerns.
602.	Axiom for Transpower	OGW admits that the CBA erroneously did not make an adjustment for the intermittency of wind, but did not make any adjustments to its CBA as a result. This is not robust. If changes in critical assumptions do not have a material effect on the estimated benefits, this is symptomatic of grave problems with a CBA.
603.	Houston Kemp for Trustpower	OGW erroneously assumes that generators would make investments in order of lowest to highest LRMC. OGW's modelling approach does not use optimisation tools to determine the best order and timing of entry. OGW has not engaged fully with Houston Kemp's reasoning as to why generation would not be expected to enter in an order from lowest to highest LRMC, or Houston Kemp's concerns regarding human error.
604.	Axiom for Transpower	OGW has failed to address the problem that the calculation of benefits assumes that each plant generates as per its assumed capacity factor. This was a matter previously raised by Axiom.
605.	Houston Kemp for Trustpower	OGW has failed to respond to critical concerns regarding its unrealistic and unsupported assumption that there will be investment in over 500MW of diesel generation capacity.
606.	Trustpower	OGW has applied inconsistent weightings to different scenarios through the modelling (for example, giving "Huntly stays" a 50% weighting in some calculations but a 0% weighting in others).

No.	Submitter	Submissions
607.	Trustpower	OGW has assumed that gas-fired power stations will not have to pay for gas or carbon emissions in their lifetimes.
608.	Houston Kemp for Trustpower	OGW has failed to respond to concerns that the benefits estimated from diesel generation are assumed. OGW does not show that the AoB charge would give rise to this investment, or that the investment would give rise to savings.
609.	Houston Kemp for Trustpower, Trustpower, EA Networks, Axiom for Transpower	OGW has failed to take into account terminal values or equivalent techniques.
610.	Houston Kemp for Trustpower	OGW has not responded adequately to concerns from submitters regarding the tools and assumptions that have been used to estimate net benefits associated with the provision of efficient locational signals for investment and new generation. In most cases, OGW has not accepted that it made any error, and has not fully engaged with the reasoning provided by Houston Kemp. In other cases, OGW concedes error but has not provided any new modelling indicating the effect of corrections to its methodology. This is likely to materially impact the estimate of net benefit.
611.	Houston Kemp for Trustpower	OGW has not responded to the submission that the relaxed PDP is unlikely to be workable. OGW has not given enough consideration to the likely costs of administration and the incentives created by the PDP. It is appropriate that the Authority has decided to remove the inefficient exit provision from the PDP.
612.	Trustpower	OGW has not used practices standard in the industry for modelling capacity expansion.

No.	Submitter	Submissions
613.	Houston Kemp for Trustpower	OGW made a further 40% downward adjustment to LRMC for load. OGW aligned its LRMC estimates with estimates sourced from Victoria, Australia. However, these figures should not be interpreted as estimates of LRMC. The figures are based on a different regulatory system, and are not accurate. Subsequently, OGW refers to LRMC estimates for sub-transmission networks. However, these are not comparable to transmission network costs. When the estimate of LRMC is transformed from a per month figure to a per annum figure, the range of values is very wide and does not support the downward adjustment applied to LRMC estimates from New Zealand. OGW's response is unsatisfactory. OGW should adjust its LRMC estimates to include a sensitivity analysis.
614.	Houston Kemp for Trustpower	OGW's assessment of the benefits of the inefficient exit component is a transfer not a benefit. OGW's response is that gross profit is a reflection of producer surplus. Houston Kemp agrees that it is part of the benefit, but is not a measure of that benefit. OGW has failed to engage with the economic reasoning provided by Houston Kemp.
615.	Axiom for Transpower, EA Networks	OGW's CBA assumes that the reallocation of costs would not create a risk of allocative efficiency losses. That is not the case. For example, it assumes the pass-through of fixed charges, when this is inconsistent with the low fixed charge regulations.
616.	Houston Kemp for Trustpower, Trustpower	OGW's CBA fails to take into account scenarios in which Huntly leaves in its estimate of the impact of removing the RCPD charge, which could change the CBA by $85.1 million. OGW acknowledges this inconsistency but does not address the issue in its response.
617.	Houston Kemp for Trustpower	OGW's CBA uses Transpower's study of demand response. Houston Kemp previously submitted that the study is not likely to be representative of a broader demand response programme, and described errors made by OGW in utilising the results of the study. OGW has not responded to any of these concerns, stating that it is not clear why the use of the Transpower study is not reasonable.
618.	Trustpower	OGW's forecasts include several potential new projects to be built in the future that have been abandoned by their former developers (e.g. Rodney CCGT, Hauāuru mā raki).

No.	Submitter	Submissions
619.	Houston Kemp for Trustpower	OGW's modelling assumes a large quantum of benefits from more efficient investment in demand management, but does not show that these would not occur under the status quo. There is a Commerce Commission process for Transpower to make investments and alternatives, and an AoB charge would not necessarily promote investment in demand management.
620.	Trustpower	OGW's modelling assumes that power can effectively flow freely between the islands, which is not correct.
621.	NERA for Meridian Energy	OGW's responses to issues raised by submitters on the CBA are reasonable.
622.	Trustpower	OGW's results are sensitive to the particular decision rules employed, which serves to highlight the lack of robustness of the modelling method.
623.	Trustpower	The additional information released by the Authority on 23 February 2017 regarding the modelling for the HVDC charge highlights the extent to which OGW's modelling assumes the HVDC charge will be inefficient, and does not correctly assess whether the HVDC charge could reduce total generation and network costs.
624.	Houston Kemp for Trustpower	The assumed 60:40 split of expenditure between load and generation is based on a proxy, because a more robust assessment was not available. No robust justification for this selection has been made and the Authority's own modelling suggests a 76:24 breakdown of benefits between load and generation. Pioneer suggested an 80:20 breakdown. Under that assumption, the net benefits estimated by OGW's model are significantly lower and may be negative.
625.	Houston Kemp for Trustpower	The assumptions used by OGW in relation to the PDP are not well justified and are extremely sensitive to the long-term price of aluminium. As such, they are not estimates of the likely net benefits of the PDP, but are estimates of the effect of the PDP on the profits of NZAS. OGW's response, that any CBA will reflect its hypothesis and that assumptions must be made to complete the modelling, is therefore inadequate.

No.	Submitter	Submissions
626.	Trustpower, Houston Kemp for Trustpower	The Authority has not followed the analytical process it said it would follow in its CBA working paper. OGW used only bottom-up modelling, without a top-down cross check.
627.	Auckland Chamber of Commerce	The Authority needs to be more transparent about the true benefits and costs of its proposals.
628.	Mercury	The Authority's assessments of the costs and benefits of its proposals have consistently been too theoretical, not adequately linked to a detailed proposal, and have not adequately considered effects on consumers. This includes OGW's CBA of the Authority's current proposals.
629.	Counties Power, Counties Power Consumer Trust	The benefits of the proposal as identified in the CBA are marginal when compared with the risk of change and the total industry value.
630.	Axiom for Transpower, EA Networks, Houston Kemp for Transpower	The CBA concludes that embedded diesel generation would increase to 500 MW if the status quo was retained but there is no basis for this conclusion. Submitters identified that: there is no basis to conclude that cheaper forms of generation have been exhausted; it is not reasonable to base a forecast on the chance that the economics of investing in diesel will improve (the opposite could be the case); decreases in the diesel price would occur in the factual and the counterfactual; and the SIMI charge will decrease the economic attractiveness of investing in diesel generation.
631.	EA Networks, Houston Kemp for Trustpower	The CBA does not adequately take into account the cost of disputes as a result of the proposal. Houston Kemp submitted that OGW has failed to respond to Houston Kemp's concerns on this point.
632.	Employers and Manufacturers Association (Northern), MediaWorks, Auckland Chamber of Commerce	The CBA does not provide enough information about its inputs.
633.	EA Networks, Axiom for Transpower, Houston Kemp for Trustpower	The CBA fails to consider alternatives to the "Huntly stays" scenario.
634.	Houston Kemp for Trustpower, Trustpower	The CBA fails to consider the potential retirement of Tiwai Point.
635.	EA Networks, Axiom for Transpower	The CBA fails to factor in constraints associated with hydroelectric plants.

No.	Submitter	Submissions
636.	Houston Kemp for Trustpower, Axiom for Transpower, EA Networks, Trustpower	The CBA fails to recognise the potential for some technologies, such as wind, to not reliably contribute at peak times.
637.	EA Networks, Axiom for Transpower, Houston Kemp for Trustpower	The CBA fails to reflect the manner in which generators make decisions about entering the market. Generators do not only consider the average total cost of a unit of generation. Axiom for Transpower submitted that OGW has failed to respond to its concerns in this regard.
638.	PwC, Alpine Energy, Aurora Energy, EA Networks, Eastland Network, Electra, Mainpower, Marlborough Lines, Nelson Electricity, Network Tasman, Northpower, The Lines Company, Top Energy, Waipa Networks, Westpower	The CBA fails to take into account the cost of the increased peak demand that is likely to result from the Authority's proposals.
639.	Trustpower, Houston Kemp for Trustpower	The CBA identifies regulatory uncertainty, but fails to factor into its CBA costs caused by that regulatory uncertainty (e.g. increased costs of capital). This raises questions about the lawfulness of the Authority's process, in that it has not taken proper account of regulatory uncertainty.
640.	ENA, Alpine Energy, Aurora Energy, Buller Electricity, Counties Power, Eastland Network, Electra, EA Networks, Horizon Energy Distribution, Mainpower, Marlborough Lines, Nelson Electricity, Network Tasman, Network Waitaki, Northpower, Orion, Powerco, PowerNet, Scan Power, The Lines Company, Top Energy, Unison, Vector, Waipa Networks, WEL Networks, Wellington Electricity Lines, Westpower	The CBA ignores transaction costs.

No.	Submitter	Submissions
641.	Mercury	The CBA should factor in a scenario where Transpower adopts the fall-back method. Given that stakeholders and Transpower cannot agree on an appropriate methodology for calculating the AoB charge, it is likely that Transpower will need to adopt the fall-back method. The CBA should take into account the potentially material inefficiencies and distortions that could result from a fall-back method based on a generator's average injection, and the potential for those inefficiencies to grow as the AoB charge increases over time.
642.	Houston Kemp for Trustpower	The CBA's modelling techniques for estimating the path of efficient generation entry are not fit for purpose.
643.	Venture Southland, Awarua Synergy, Dongwha, EIS, E-Type Engineering, HW Richardson Group, Southland Chamber of Commerce, South Port, Sarah Dowie MP, Southland District Council, Southland Manufacturers Trust, Southland Mayoral Forum, Todd Barclay MP, Invercargill City Council, Gore District Council, Grey Power Southland, Export Southland	The estimate that New Zealand will save $200 million as a result of more efficient use of the grid under the Authority's proposal is conservative. The actual benefits are likely to be much greater.
644.	PwC, Alpine Energy, Aurora Energy, EA Networks, Eastland Network, Electra, Mainpower, Marlborough Lines, Nelson Electricity, Network Tasman, Northpower, The Lines Company, Top Energy, Waipa Networks, Westpower	The guidelines should require that Transpower obtain an independent CBA after the TPM is designed but before it is implemented. The guidelines should require that a new TPM be implemented only if it would have clear positive benefits.

No.	Submitter	Submissions
645.	Trustpower	There are material mechanical errors in OGW's calculation of the original status quo build schedule, which may have arisen due to a lack of flexibility in the modelling, including hardcoding of references. These include: incorrect cell references; inconsistencies between the commissioning years and the costs of plant build from year 19; incorrect references to scheme capacity in the calculation of capital cost; and a lack of capital cost incurred for plants built in year 30. There are also mechanical errors in the cost of the build schedule without the SIMI charge, including: an inconsistent formula in cell AB79; not including the costs of Lake Coleridge 2 from year 28 and Stockton Mine from year 29; and not including the capital costs of Waitahora in year 30. Correcting these errors results in a total net cost of removing the SIMI charge of $113.5 million.

General

General: problem definition

No.	Submitter	Submissions
646.	Covec, Counties Power, Counties Power Consumer Trust, ENA, Entrust, Northern Federated Farmers, Northpower, Top Energy, Trustpower, Vector	Expert submissions criticise the Authority's problem definition, which initially defined the problem as including the absence of a proposed solution.
647.	Auckland Chamber of Commerce, Employers and Manufacturers Association (Northern)	The Authority has not adequately defined the problem it is trying to solve.
648.	Covec, Counties Power, Counties Power Consumer Trust, ENA, Entrust, Northern Federated Farmers, Northpower, Top Energy, Trustpower, Vector, Orion, Fonterra	The Authority has not presented evidence that the Commerce Commission has actually approved inefficient investments, nor that the process would be more efficient as a result of the Authority's proposal. Therefore, it is not clear whether there is a problem with the current TPM.
649.	Counties Power, Counties Power Consumer Trust	The Authority's conclusion that the grid investment process is inefficient is surprising because that process is managed by the Commerce Commission.

No.	Submitter	Submissions
650.	Covec, Counties Power, Counties Power Consumer Trust, ENA, Entrust, Northern Federated Farmers, Northpower, Top Energy, Trustpower, Vector	The Authority's policy-making does not appear to be directed towards a single problem definition.
651.	Covec, Counties Power, Counties Power Consumer Trust, ENA, Entrust, Northern Federated Farmers, Northpower, Top Energy, Trustpower, Vector	The conclusion that the grid investment process is inefficient contradicts the Authority's conclusion that the investments made since May 2004 provide more benefits than cost.
652.	Venture Southland, Awarua Synergy, Dongwha, EIS, E-Type Engineering, HW Richardson Group, Southland Chamber of Commerce, South Port, Sarah Dowie MP, Southland District Council, Southland Manufacturers Trust, Southland Mayoral Forum, Todd Barclay MP, Invercargill City Council, Gore District Council, Grey Power Southland, Export Southland, PowerNet	The current TPM does not drive efficient investment decisions, and does not meet the Authority's statutory objective.
653.	Venture Southland, Awarua Synergy, Dongwha, EIS, E-Type Engineering, HW Richardson Group, Southland Chamber of Commerce, South Port, Sarah Dowie MP, Southland District Council, Southland Manufacturers Trust, Southland Mayoral Forum, Todd Barclay MP, Invercargill City Council, Gore District Council, Grey Power Southland, Export Southland	The current TPM is not cost-reflective, because those who benefit from greater reliability and access to distant hydropower do not have to pay for those benefits.

No.	Submitter	Submissions
654.	Venture Southland, Awarua Synergy, Dongwha, EIS, E-Type Engineering, HW Richardson Group, Southland Chamber of Commerce, South Port, Sarah Dowie MP, Southland District Council, Southland Manufacturers Trust, Southland Mayoral Forum, Todd Barclay MP, Invercargill City Council, Gore District Council, Grey Power Southland, Export Southland, Canterbury Employers' Chamber of Commerce, Business Central	The current TPM is not durable.

General: specificity of guidelines

No.	Submitter	Submissions
655.	Contact Energy	Concerned that material aspects of the TPM remain uncertain, and still need to be determined by Transpower.
656.	Auckland Airport	Giving Transpower further flexibility, and ensuring that the TPM guidelines only provide principled, high-level guidance, will help the TPM guidelines withstand disruption and market changes. Transpower is better placed to make decisions about details than the Authority. The price cap will limit Transpower's ability to implement a TPM that falls outside of the parameters set by the Authority.
657.	Meridian Energy, Orion	Giving Transpower too much discretion on some matters may result in Transpower proposing a TPM that is different from what was intended. This could cause delays if the Authority disagrees with Transpower on a key issue at the final stage.
658.	NERA for Meridian Energy	In giving Transpower discretion under the guidelines, the Authority should consider the fact that Transpower is incentivised to do things that are not aligned with the Authority's objectives.

No.	Submitter	Submissions
659.	IEGA, Pioneer Energy, NZ Energy, Otago Chamber of Commerce, MEUG, Fonterra, Oji Fibre Solutions, Winstone Pulp International, Business NZ, Canterbury Employers' Chamber of Commerce, Business Central, Auckland Airport, Trustpower, PwC, ENA, Alpine Energy, Aurora Energy, Buller Electricity, Counties Power, Eastland Network, Electra, EA Networks, Horizon Energy Distribution, Mainpower, Marlborough Lines, Nelson Electricity, Network Tasman, Network Waitaki, Northpower, Orion, PowerNet, Scan Power, The Lines Company, Top Energy, Unison, Vector, Waipa Networks, WEL Networks, Wellington Electricity Lines, Westpower, Powerco	It is good that Transpower will have more flexibility/discretion in developing the TPM.
660.	Trustpower, Professor Yarrow for Trustpower	The Authority has a supervisory role in developing the TPM and should issue guidelines of a guiding, rather than prescriptive nature (see *Contact Energy v Electricity Commission*). The guidelines should provide regulatory certainty to customers, but should not be overly prescriptive. Transpower has the primary responsibility for developing the TPM, so long as it is within a range of permissible transmission charging structures that will align with regulatory norms and section 15 of the Electricity Industry Act. Instead, the Authority has made very prescriptive guidelines. Because Transpower and the Authority do not agree on the best pricing structure, the Authority's approach creates durability risks. The Authority is overreaching in developing such prescriptive guidelines.
661.	Buller Electricity	The Authority should put forward guidelines that are principles-based rather than prescriptive, due to the lack of consensus to date.

No.	Submitter	Submissions
662.	Business NZ, Canterbury Employers' Chamber of Commerce, Business Central	The degree of flexibility that Transpower will have in developing the new TPM means that it is extremely important that Transpower is transparent and properly consults stakeholders as it develops the new TPM.
663.	Covec, Counties Power, Counties Power Consumer Trust, ENA, Entrust, Northern Federated Farmers, Top Energy, Trustpower, Vector, Employers and Manufacturers Association (Northern), MediaWorks, Auckland Chamber of Commerce, Northpower, Norske Skog	The guidelines are too prescriptive. This is contrary to the Authority's role and would make it difficult for Transpower to implement the guidelines. Transpower's task would be difficult, highly sensitive to modelling assumptions, and contentious.
664.	Read for Meridian	The guidelines have had successive revisions. As a result, they now: overlook major points (assumed to be understood and agreed by all); have too much detail on some points; have unnecessary distinctions carried over from earlier drafts; are not well-structured; and intermingle transitional and long-term TPM provisions. These defects will make it difficult for Transpower to implement the guidelines in a way that reflects the Authority's intended goals. To be durable and clear, the structure of the guidelines should reflect the hierarchy and prioritisation of the TPM elements, the goals and priority order of charges should be stated clearly, inappropriate constraints should be removed, and long-term elements and transitional elements separated. For example, in relation to the AoB charge, the nature and objectives of the charge should be stated (including what "area" and "benefit" might mean), and the process by which the level and form of AoB charges to individual participants should be stated (including the assets to which the methodology applies, potential beneficiaries of the assets, cost recovery targets, form of cost recovery charges, and review processes).
665.	Genesis Energy	The guidelines remain too prescriptive in places and should be revised using the framework proposed by Castalia (which stresses the need for further refinements to the drafting of the Guidelines to deliver the right level of discretion for Transpower).

No.	Submitter	Submissions
666.	Counties Power, Counties Power Consumer Trust, Auckland Airport, Trustpower, Professor Yarrow for Trustpower, Buller Electricity, Covec, ENA, Entrust, Northern Federated Farmers, Northpower, Top Energy, Vector, Employers and Manufacturers Association (Northern), MediaWorks, Auckland Chamber of Commerce, Northpower, Norske Skog	The guidelines should give more flexibility to Transpower to develop the TPM.
667.	Top Energy, Ngawha Generation	The increase in discretion for Transpower will result in more uncertainty for Transpower's customers.
668.	PwC, Alpine Energy, Aurora Energy, EA Networks, Eastland Network, Electra, Mainpower, Marlborough Lines, Nelson Electricity, Network Tasman, Northpower, The Lines Company, Top Energy, Waipa Networks, Westpower	The problems identified by submitters will not be resolved just by giving discretion to Transpower. In addition, greater discretion will reduce certainty and lead to an increased risk of legal challenge.
669.	Northpower	The TPM guidelines should be sufficiently flexible so as to allow Transpower to consult with the industry in order to jointly develop a fit-for-purpose and durable TPM.
670.	Transpower	There should be less ambiguity in some parts of the guidelines, for example in relation to clause 12 of the guidelines.
671.	Unison, Centralines	Transpower has too much discretion to develop the TPM.

No.	Submitter	Submissions
672.	ENA, Alpine Energy, Aurora Energy, Buller Electricity, Counties Power, Eastland Network, Electra, EA Networks, Horizon Energy Distribution, Mainpower, Marlborough Lines, Nelson Electricity, Network Tasman, Network Waitaki, Northpower, Orion, Powerco, PowerNet, Scan Power, The Lines Company, Top Energy, Unison, Vector, Waipa Networks, WEL Networks, Wellington Electricity Lines, Westpower	Transpower must be given sufficient criteria and flexibility to implement the guidelines in a way that does not result in unreasonable or perverse outcomes.

General: nodal price signals

No.	Submitter	Submissions
673.	Oji Fibre Solutions	A forward-looking price signal is required to avoid the need for unnecessary and costly future transmission investments.
674.	Covec, Counties Power, Counties Power Consumer Trust, ENA, Entrust, Northern Federated Farmers, Northpower, Top Energy, Trustpower, Vector, Bushnell/Wolak for Trustpower, Axiom for Transpower	No TPM can simultaneously provide for efficient short-run and long-run incentives while also covering Transpower's costs. The TPM guidelines must therefore trade-off inefficiencies.
675.	Covec, Counties Power, Counties Power Consumer Trust, ENA, Entrust, Northern Federated Farmers, Northpower, Top Energy, Trustpower, Vector	Some experts consider that nodal pricing sends an adequate locational signal, so an additional locational signal is not required.
676.	Axiom for Transpower	With nodal pricing signals alone, new investments may be made before nodal prices ever reach levels that would provide signals to parties.

No.	Submitter	Submissions
677.	ENA, Alpine Energy, Aurora Energy, Buller Electricity, Counties Power, Eastland Network, Electra, EA Networks, Horizon Energy Distribution, Mainpower, Marlborough Lines, Nelson Electricity, Network Tasman, Network Waitaki, Northpower, PowerNet, Scan Power, The Lines Company, Top Energy, Unison, Vector, Waipa Networks, WEL Networks, Wellington Electricity Lines, Westpower, Pioneer Energy, Otago Chamber of Commerce, Orion, Transpower, Axiom for Transpower, Oji Fibre Solutions, Powerco	The Authority's claim that nodal prices are sufficient, and therefore a further, explicit price signal is not required, is wrong. That is because locational marginal price differentials will not adequately signal long-term grid costs.
678.	EA Networks, Axiom for Transpower	The Authority's position that nodal prices are sufficient contradicts its previous statement that nodal prices cannot be relied on to signal long-term costs. The Authority's position is also irreconcilable with the AoB proposal (which should be unnecessary if nodal pricing is adequate).
679.	Orion, Northpower, Otago Chamber of Commerce	The proposals will weaken price signals for peak demand response and will inefficiently bring forward grid investment.

General: complexity

No.	Submitter	Submissions
680.	Counties Power Consumer Trust	An example of durability and practicality problems created by complexity is the Authority's miscalculation by 33% of the transmission charges that Counties Power would face under the Authority's proposals.
681.	Powerco	At this stage, it is not possible to comment on how the different components of the Authority's proposals might interact and flow through to transmission prices, which distributors are required to pass through to consumers in a transparent and consistent manner.

No.	Submitter	Submissions
682.	Auckland Chamber of Commerce, PwC, Alpine Energy, Aurora Energy, EA Networks, Eastland Network, Electra, Mainpower, Marlborough Lines, Nelson Electricity, Network Tasman, Northpower, The Lines Company, Top Energy, Waipa Networks, Westpower, Powerco, Transpower, Mercury, Counties Power Consumer Trust	The Authority's proposals are too complex.
683.	PwC, Alpine Energy, Aurora Energy, EA Networks, Eastland Network, Electra, Mainpower, Marlborough Lines, Nelson Electricity, Network Tasman, Northpower, The Lines Company, Top Energy, Waipa Networks, Westpower	The Authority's proposals are too complex, which will result in increased costs.
684.	Transpower, Mercury	The complexity of some of the proposed refinements is concerning given that the benefits of the refinements are modest.
685.	Mercury, Counties Power Consumer Trust	The proposed refinements increase the complexity of the Authority's proposals, and will therefore further reduce the durability of the Authority's proposals.
686.	Nova	The proposed refinements increase the complexity of the Authority's proposals, and mute pricing signals that could otherwise reflect grid costs and incentivise efficient investments.

General: pricing effects

No.	Submitter	Submissions
687.	Auckland Chamber of Commerce	Because of the extent of their contribution to New Zealand's GDP, the proposed increases in transmission charges for Auckland and the upper North Island will damage business and investor confidence.

No.	Submitter	Submissions
688.	Sarah Dowie MP	The New Zealand Aluminium Smelter pays some of the highest transmission charges of any smelters in the world, as Southland pays for the cost of transmitting electricity to the north under the current TPM. This is unsustainable and makes it hard for NZAS to compete internationally. Southland's economy needs NZAS to remain viable.
689.	Invercargill City Council, Port Otago, John Burrows	Concerned that the refinements will reduce the benefits and projected savings for households and/or businesses in the South / tend to favour consumers in the upper North Island over the rest of the country.
690.	Northern Federated Farmers	Despite the introduction of the refinements to the Authority's proposal, farmers in the Auckland and Northland areas will face increased prices for electricity, while some large generators will make windfall gains.
691.	Norske Skog	Even with the proposed refinements, the Authority's proposals threaten the viability of Norske Skog's business.
692.	Auckland Chamber of Commerce	Greater Auckland will be the most affected by the Authority's proposals, but there is little evidence that the Authority's proposals will bring any measurable benefit to greater Auckland.
693.	Northland Regional Council	Increases in charges are likely to have a disproportionate effect on Northland.
694.	NZ Steel	It does not make sense that closure of the Southdown and Otahuhu thermal stations would result in lower fuel costs for the generation coming out of Taranaki. This would increase costs to NZ Steel and Auckland consumers, because of the so-called attributed benefits arising from Transpower grid upgrades.
695.	South Port, Sarah Dowie MP	It is good that the Authority's proposals will benefit Southland. Submitters identified that the proposal would: directly assist exporters in southern New Zealand; deliver greater longer term value for New Zealand; benefit people in Southland (particularly the elderly, because Southland is cold and has old housing stock); support efforts to address social and economic vulnerability; and make Southland more attractive to a range of industries.
696.	Counties Power, Counties Power Consumer Trust	It is illogical that Counties Power/rural South Auckland should face higher transmission charges despite being supplied by older assets.

No.	Submitter	Submissions
697.	Northpower	Many residential and commercial consumers will face price increases that exceed the Authority's estimate of a $46 increase per annum.
698.	David Gethen via Entrust, John Round via Entrust, Ray Baker via Entrust, Tavia Khaine via Entrust, Tina Tucker via Entrust, Employers and Manufacturers Association (Northern), Auckland Chamber of Commerce	Residential consumers in Auckland/Northland should pay less for electricity/should not face higher prices as a result of the Authority's proposals.
699.	Kevin Veale, W Devine, Chris Henderson, Pamela Mills, Deb McGregor via Entrust, Ellen Coleman via Entrust, Esther Hansen via Entrust, Helen Main via Entrust, Mark Yates via Entrust, Mary Pope via Entrust, Sandra Mclean via Entrust, William Mckay via Entrust	Residential consumers should pay less for electricity.
700.	Otago Southland Employers' Association, Port Otago, Queenstown Lakes District Council, Southland Manufacturers Trust, Dunedin City Council, Clutha District Council, Canterbury Employers' Chamber of Commerce	Support the Authority's focus on improving dynamic efficiency and delivering a national net public benefit, rather than on the impact of its proposals on individual regions.
701.	Pamela Mills, T M Clarke, Caleb Sim, Belinda Burdon, Bev Thorne, Lou O'Callaghan, Matt Schuck, Kelly O'Connor	The allocation of costs to Southland consumers under the current TPM is not fair. Reasons include: Southland consumers face higher costs of living as a result of the higher costs of transmission to Southland; Southland's colder climate; and the lack of retail competition in Southland.
702.	Northland Regional Council, Northland Inc, Northland Chamber of Commerce	The Authority continues to overstate the benefit of recent grid upgrades to Northland, as Northland continues to face inadequate security of supply. Consequently, the Authority's proposals would result in Northland subsidising transmission costs for more economically sound regions and industries.
703.	Energy Trusts of New Zealand	The Authority has failed to adequately/transparently disclose the impact of its proposals on consumers.

No.	Submitter	Submissions
704.	Energy Trusts of New Zealand	The Authority should be more transparent about the extent to which its assessment of the effects of its proposals on prices for consumers relies on price reductions driven by the Commerce Commission.
705.	Otago Chamber of Commerce	The Authority's proposal is not durable, because of the major changes in the way that charges are allocated between different customers.
706.	Otago Chamber of Commerce, GBC Winstone	The Authority's proposals are too complex for businesses and investors to be able to predict with certainty the charges they will have to pay. That uncertainty will make business planning more difficult.
707.	Elaine Dyett via Entrust, Mike Conner via Entrust, Murray Potter via Entrust, Mark Titchener via Entrust	The Authority's proposals will incentivise residential consumers to go off the grid (for example, by investing in solar panels) / invest in alternative technology to avoid increased electricity prices.
708.	Entrust, 117 consumers via Entrust	The Authority's proposals will result in a significant wealth transfer from consumers to large generators and major (sometimes foreign-owned) corporate consumers such as the Tiwai Point Smelter. Consumers should not be made to subsidise these parties' costs.
709.	Employers and Manufacturers Association (Northern)	The Authority's proposals will result in more litigation and further disputes with Transpower and the Authority.
710.	Norske Skog	The Authority's proposals will result in significant wealth transfers.

No.	Submitter	Submissions
711.	PowerNet, Nadezhda and Alexandre Firioubine, Caleb Sim, Belinda Burdon, Pamela Mills, Renee Buddle, T M Clarke, Lou O'Callaghan, Matt Schuck, Kelly O'Connor, Canterbury Employers' Chamber of Commerce, Venture Southland, Awarua Synergy, Dongwha, EIS, E-Type Engineering, HW Richardson Group, Southland Chamber of Commerce, South Port, Sarah Dowie MP, Southland District Council, Southland Manufacturers Trust, Southland Mayoral Forum, Todd Barclay MP, Invercargill City Council, Gore District Council, Grey Power Southland, Export Southland, Otago Southland Employers' Association, Port Otago, Queenstown Lakes District Council, Dunedin City Council, Clutha District Council	The current TPM is not cost-reflective. The south of New Zealand (or regions that have not had many recent grid upgrades) subsidises the costs of the north of New Zealand (or regions that have had recent grid upgrades). Submitters identified that this had negative effects including: undermining the South's competitive advantages; difficulty in encouraging business growth and development, high costs for NZAS (which is crucial to Southland's economy); negative flow-on effects for New Zealand's economy; inconsistency with Southland's regional development programme; and disadvantages to exports in the international market.
712.	Vector, Entrust	The forecast impacts of the proposed TPM are already affecting locational decisions. For example, concerns about transmission charges were a factor in the Ngawha plant not proceeding.
713.	NZ Steel	The guidelines could result in the closure of NZ Steel's operations in New Zealand.
714.	Vector, Entrust	The high level of stakeholder interest highlights the impact of unreasonable increases in grid costs for the majority of grid end-users.
715.	Employers and Manufacturers Association (Northern), MediaWorks	The increased charges for consumers on Vector's network will negate the decreases in line charges recently mandated by the Commerce Commission.

No.	Submitter	Submissions
716.	Venture Southland, Awarua Synergy, Dongwha, EIS, E-Type Engineering, HW Richardson Group, Southland Chamber of Commerce, South Port, Sarah Dowie MP, Southland District Council, Southland Manufacturers Trust, Southland Mayoral Forum, Todd Barclay MP, Invercargill City Council, Gore District Council, Grey Power Southland, Export Southland	The modelled price increases for customers in Auckland and the upper North Island are modest, while the rest of the country can expect a modest price decrease.
717.	Unison, Centralines	The proposal will result in consumers becoming liable for a much higher share of the costs as a result of changes to the HVDC charge.
718.	EA Networks	The proposal would result in EA Networks paying much higher charges than other South Island parties that use the same assets.
719.	Northland Chamber of Commerce, Northpower, Refining NZ, Ellen Coleman via Entrust, Esther Hansen via Entrust, Mary Pope via Entrust	The proposed increase in transmission charges for Northland would have adverse social consequences for Northland. Submitters identified that: social effects would be higher in Northland in the context of Northland's need for financial support from the Government; and that increased charges would have negative effects on the local economy.
720.	Northland Inc, Northland Regional Council, Northland Chamber of Commerce, Northpower, Employers and Manufacturers Association (Northern), Debbie Pitman via Entrust, Northern Federated Farmers, Media Works, Auckland Chamber of Commerce, Refining NZ, Top Energy, Ngawha Generation	The proposed increases in transmission charges for Northland would have negative effects on the Northland economy. Submitters identified that charges could: threaten the viability of large businesses and employers in Northland; result in negative flow-on effects for the national economy; deter investment in Northland; result in job losses; result in higher costs for farmers; be inconsistent with government initiatives to promote economic development and job growth in Northland (for example, increases in prices would exceed the funding Northland receives under the Tai Tokerau Northland Action Plan); and result in the allocation of charges to a smaller and smaller group of payers.
721.	Unison, Centralines	The proposed refinement would result in significant wealth transfers from residential consumers.

No.	Submitter	Submissions
722.	GBC Winstone, Northland Inc, Northpower	It would not be fair to make Northland pay for recent grid upgrades, as Northland has already paid its fair share.
723.	117 consumers via Entrust, Vector, Entrust	Transmission costs should be funded equally by all users of the grid, including generators.

General: interaction of TPM with DGPPs

No.	Submitter	Submissions
724.	Energy Trusts of New Zealand	ACOT payments place additional competitive pressures on generators that are not distributed generators. Those competitive pressures flow through to consumers in the form of lower retail electricity prices.
725.	Transpower	If the AoB charge is adopted, Schedule 6.4 of the Code could be amended to define ACOT as avoided LRMC charges only.
726.	Transpower	It is not necessary to wait until the TPM has been implemented to consider adjustments to the DGPP regime. To be effective, transmission pricing signals need to reach end-users and distributed generation. The difference between avoided charges and avoided costs is a problem with the TPM, not the DGPP. Replacing current RCPD charges with LRMC or LRMC-like charges would fix the problem.
727.	Transpower	The "ACOT problem" could be worse under an AoB charge than under RCPD. RCPD may over-signal reductions in peak-usage, which can lower or delay transmission investments (even if this is inefficient). The ACOT problem under an AoB charge would be about avoiding a share of AoB charges for sunk investments.
728.	Energy Trusts of New Zealand	The Authority has not made its intentions regarding ACOT payments and the treatment of DG/PV clear. As a result, it is not clear how the TPM will interact with the Authority's proposals relating to the DGPPs.

No.	Submitter	Submissions
729.	Castalia for Genesis	The Authority is creating a circular process in which Transpower must implement the DGPP reforms, develop a new TPM, and then consider whether changes are needed to the DGPP regime, without sufficient information to do those tasks properly. This may: negatively impact on competitive neutrality and the efficiency of the TPM process; cause uncertainty and litigation risk; and increase workloads for Transpower and the Authority. Instead, the Authority should delay the development and implementation of the TPM process, and give Transpower more discretion, both in relation to policy and the timing of the development and implementation of the new TPM.
730.	Energy Trusts of New Zealand	The Authority should back up its assertion that reductions in ACOT payments to distributed generators flow through to consumers in the form of lower retail electricity prices, with research on retail prices in different parts of the country where ACOT payments are and are not made.
731.	Pioneer Energy, Otago Chamber of Commerce	The Authority should consider how the residual charge is reconciled with payments to distributed generators, with adjusted AMD and DGPP payments made by network businesses.
732.	Powerco	The Authority should work closely with the Commerce Commission to ensure that any changes to the DGPPs/ACOT payments do not result in unintended consequences.

No.	Submitter	Submissions
733.	Genesis Energy, ENA, Alpine Energy, Aurora Energy, Buller Electricity, Counties Power, Eastland Network, Electra, EA Networks, Horizon Energy Distribution, Mainpower, Marlborough Lines, Nelson Electricity, Network Tasman, Network Waitaki, Northpower, Orion, Powerco, PowerNet, Scan Power, The Lines Company, Top Energy, Vector, Waipa Networks, WEL Networks, Wellington Electricity Lines, Westpower, Pioneer Energy, Otago Chamber of Commerce, Unison, Centralines, Castalia for Genesis	The DGPP and TPM reforms need to be coordinated in order to deliver the best outcomes.
734.	Genesis Energy	The DGPP and TPM timelines should be better aligned, to allow Transpower to more efficiently use its resources when implementing the two reforms.
735.	Unison, Centralines, PowerNet	The proposed refinement addresses a gap in the DGPP reform. However, it is unfair that there will be an 18 month delay in which distributors may be unable to recover ACOT payments. Unison submitted that that this would disadvantage many parties and harm durability and confidence in the regulatory system, and that Part 6 of the Code should be amended to align the timing of the two reforms.
736.	Buller Electricity	The TPM could conflict with the DGPP regime.

General: interaction of TPM with distribution pricing

No.	Submitter	Submissions
737.	ENA, Alpine Energy, Aurora Energy, Buller Electricity, Counties Power, Eastland Network, Electra, EA Networks, Horizon Energy Distribution, Mainpower, Marlborough Lines, Nelson Electricity, Network Tasman, Network Waitaki, Northpower, Orion, Powerco, PowerNet, Scan Power, The Lines Company, Top Energy, Unison, Vector, Waipa Networks, WEL Networks, Wellington Electricity Lines, Westpower	Reforms to transmission pricing, the DGPPs, and distribution pricing need to be coordinated to deliver the best outcomes.
738.	Contact Energy, Orion	The Authority's approaches to transmission pricing and distribution pricing appear to be inconsistent. The unavoidable fixed cost approach in the TPM is inconsistent with the service-based, dynamic pricing approach to distribution pricing. Contact submitted that this may reduce competition and consumer choice.
739.	NZ Steel	The TPM and distribution pricing regimes should be aligned, for example, by requiring that EDBs translate TPM incentives into distribution pricing.
740.	Buller Electricity	The TPM could conflict with other Code provisions, the Commerce Commission's Part 4 regime, and the DGPP regime.
741.	Transpower	There needs to be policy coherence between distribution pricing and the TPM. The benefits of distributors adopting peak-usage charges depends on whether distributors incur peak-based charges. Work done by ENA shows that there is a correlation between transmission and distribution peak-demand periods. Consumers should face price signals that reflect the costs of the distribution and transmission networks.
742.	Transpower	Transpower is concerned at the lack of regulatory coordination between the distribution pricing regime and the TPM.

General: service-based and cost-reflective pricing

No.	Submitter	Submissions
743.	Oji Fibre Solutions	Although the objective of "cost-reflective and service-based pricing" is reasonable and consistent with the Authority's statutory objective, it lacks sufficient clarity, and does not take into account issues such as reliability and security of supply.
744.	W Devine, John Burrows, Otago Southland Employers' Association, Port Otago, Queenstown Lakes District Council, Southland Manufacturers Trust, Dunedin City Council, Clutha District Council	Concerned that the Authority is diluting its proposals.
745.	Counties Power, Counties Power Consumer Trust, Northern Federated Farmers	Grid costs should be socialised, as they are the cost of assets of national importance.
746.	Otago Southland Employers' Association, Port Otago, Queenstown Lakes District Council, Southland Manufacturers Trust, Dunedin City Council, Clutha District Council, Business Central	Questions whether the refinements the Authority has proposed are consistent with the principles of cost-reflective and service-based pricing.

No.	Submitter	Submissions
747.	Contact Energy, Auckland Airport, Pacific Aluminium, New Zealand Aluminium Smelter, Venture Southland, Awarua Synergy, Dongwha, EIS, E-Type Engineering, HW Richardson Group, Southland Chamber of Commerce, South Port, Sarah Dowie MP, Southland District Council, Southland Manufacturers Trust, Southland Mayoral Forum, Todd Barclay MP, Invercargill City Council, Gore District Council, Grey Power Southland, Export Southland, Otago Southland Employers' Association, Port Otago, Queenstown Lakes District Council, Dunedin City Council, Clutha District Council, University of Otago, Business NZ, Canterbury Employers' Chamber of Commerce, Business Central	Support the principle of cost-reflective and service-based pricing.

No.	Submitter	Submissions
748.	Venture Southland, Awarua Synergy, Dongwha, EIS, E-Type Engineering, HW Richardson Group, Southland Chamber of Commerce, South Port, Sarah Dowie MP, Southland District Council, Southland Manufacturers Trust, Southland Mayoral Forum, Todd Barclay MP, Invercargill City Council, Gore District Council, Grey Power Southland, Export Southland, Otago Southland Employers' Association, Port Otago, Queenstown Lakes District Council, Dunedin City Council, Clutha District Council, PowerNet, University of Otago, W Devine, Caleb Sim, Belinda Burdon, Bev Thorne, Pamela Mills, T M Clarke, Lou O'Callaghan, Matt Schuck, John Burrows, Kelly O'Connor, Auckland Chamber of Commerce, Business NZ, Canterbury Employers' Chamber of Commerce, Business Central	Support the principle of user-pays.

General: renewable energy

No.	Submitter	Submissions
749.	John Brown via Entrust	The Authority's proposals disincentivise investment in solar energy/alternatives to using electricity from the grid.
750.	Otago Southland Employers' Association, Port Otago, Queenstown Lakes District Council, Southland Manufacturers Trust, Dunedin City Council, Clutha District Council	If the proposed guidelines are further diluted, energy-intensive industries will not have an incentive to build closer to the renewable hydrogeneration in the Otago and Southland regions.
751.	Counties Power Consumer Trust	MBIE should adopt new Government policies and regulations to improve the legislation that gives the Authority its mandate to develop transmission pricing guidelines.

No.	Submitter	Submissions
752.	Southland Manufacturers Trust	The Authority should adopt a pricing model that will provide the most effective signals to ensure that future investment decisions about the location of capacity and demand are made in the interests of all New Zealanders. If possible, this should include a focus on renewable sources of generation.
753.	Otago Chamber of Commerce	The Authority's proposal does not acknowledge or include any mechanisms to help achieve the Government's target of 90% renewable electricity by 2025.
754.	University of Otago	Transmission charges should not unreasonably constrain the ability to build generation from renewable resources.

General: other

No.	Submitter	Submissions
755.	Employers and Manufacturers Association (Northern), MediaWorks, Northern Federated Farmers, Auckland Chamber of Commerce	Given Transpower's annual costs of $900 million per year, the estimated net benefits of the Authority's proposal of between $175 million to $210 million over a 30 year period, or no positive net benefit at all, are minimal/negligible/within the margin of error.
756.	Northern Federated Farmers	Agree that the current approach to transmission pricing could be improved upon, but the Authority's proposals are not the optimal approach for transmission pricing.
757.	Covec, Counties Power, Counties Power Consumer Trust, ENA, Entrust, Northern Federated Farmers, Northpower, Top Energy, Trustpower, Vector	All of the experts that commented on a highly granular from of beneficiaries'-pay (as opposed to potential alternatives) did not think that the TPM proposal would result in reduced distortions in grid use.
758.	Buller Electricity	Buller Electricity seeks the Authority's clarification on how a scenario in which Buller is incentivised to disconnect from the grid by fixed and unavoidable costs would be treated. Buller questions whether the outcome of this scenario is the efficiency outcome that the Authority seeks. Full details of this scenario are included in the submission.

No.	Submitter	Submissions
759.	Transpower	Clause 38 of the guidelines should only apply to clause 37(a) of the guidelines, because there is no residual charge under the current TPM and no specific means of allocating overhead expenses within the interconnection charge. Transpower has assumed that the Authority does not wish to allocate overhead expenses to load on the basis of RCPD.
760.	Transpower	Clause 39 of the guidelines, which concerns the allocation of charges to new designated transmission customers, conflicts with clause 40 of the guidelines. Clause 39 of the guidelines also requires Transpower to ignore any changes to the new TPM between when it first comes into force and when the new customer enters. The TPM should be applied to new customers on its then current terms.
761.	Transpower	Clause 5(a)(ii) of the guidelines and clause 47(c) of the guidelines are overlapping and inconsistent.
762.	Transpower	Clause 53 of the guidelines provides that if Transpower does not include additional components, it would be desirable for Transpower to keep each of the components not included under review and consider whether to propose a variation in relation to them. This clause should be removed. It is inappropriate for the guidelines to require continuous monitoring. It is also unclear whether the word "desirable" imports an obligation.
763.	Transpower	"Connection asset" should not be defined in clause 5(a)(i) of the guidelines. It should be defined elsewhere.
764.	Covec, Counties Power, Counties Power Consumer Trust, ENA, Entrust, Northern Federated Farmers, Northpower, Top Energy, Trustpower, Vector	Experts do not think that the Authority's approach is consistent with international best practice.
765.	Orion	If bad decisions have been made by the Commerce Commission, there should be a discussion of why the Capex IM under Part 4 of the Commerce Act is a relevant area for consideration.

No.	Submitter	Submissions
766.	Transpower	It is good that clause 18(a) of the guidelines generalises the date on which the TPM comes into force. This should also be amended for clauses 15 and 17 of the guidelines, which still assume a 1 April 2020 effective date. The date in those clauses is not realistic, and it is inappropriate for the Authority to assume the outcome of a decision that it has not yet made.
767.	MEUG, Fonterra, Oji Fibre Solutions, Winstone Pulp International	It is good that clause 4(c) of the guidelines now specifies that the TPM must set charges in a way that is service-based and cost-reflective.
768.	Ted Crawford via Entrust	It is not clear how much of the increased prices for consumers will go towards salary increases, bonuses, and perks or executives.
769.	Trustpower, Bushnell/Wolak for Trustpower	It is not efficient to apply beneficiaries-pay pricing to the recovery of transmission costs. That is because: most transmission costs are common to all users; benefits of the transmission network do not come at the expense of others; identifying beneficiaries is very subjective and can be distortionary; the process of identifying beneficiaries creates incentives for parties who underestimate benefits; the approach will not improve transmission investment efficiency; and beneficiaries-pay is difficult to implement because it relies on forecasting, which is difficult.
770.	Fonterra	It is unlikely that the Authority's proposals will result in more efficient transmission investments.
771.	CEC for Trustpower	Meridian relies on a report by Professor Littlechild, who does not express any specific support for beneficiaries-pay pricing, and has never proposed or supported beneficiaries-pay pricing.
772.	Covec, Counties Power, Counties Power Consumer Trust, ENA, Entrust, Northern Federated Farmers, Northpower, Top Energy, Trustpower, Vector	Most experts did not think that the TPM proposal would materially improve the efficiency of future investments in generation, load, and transmission.
773.	Covec, Counties Power, Counties Power Consumer Trust, ENA, Entrust, Northern Federated Farmers, Northpower, Top Energy, Trustpower, Vector	Most experts did not think that the TPM would become more durable as a result of the Authority's proposal.

No.	Submitter	Submissions
774.	Covec, Counties Power, Counties Power Consumer Trust, ENA, Entrust, Northern Federated Farmers, Northpower, Top Energy, Trustpower, Vector	Most experts did not agree that the guidelines promote long-term benefits for electricity consumers.
775.	Trustpower, Bushnell/Wolak for Trustpower, CEC for Trustpower	NERA for Meridian has used a US case study to justify the introduction of beneficiaries' pay in New Zealand. However, there are differences between the two regulatory environments. For example, in the US case, beneficiaries' pay was introduced to counter insufficient investment, not too much investment. Therefore, the comparison is not useful.
776.	Grant Crawshay via Entrust	New Zealand should be using technology to manage peaks, rather than building more infrastructure.
777.	Transpower	On balance, the refinements will help Transpower develop a new TPM.
778.	Grant Crawshay via Entrust	Regulatory uncertainty arising from the Authority's review is deterring investment in new technology.
779.	Nancy Joll, Jim Fish	Support the Authority's proposals.
780.	University of Otago	Support the idea of DG to help meet demand when and where it arises.
781.	Contact Energy	Support the majority of the Authority's proposals and refinements, with the caveat that Contact has not been able to quantify the financial impact of the Authority's proposals.
782.	Buller Electricity	The allocation process for the TPM increases complexity, transaction costs, and investment risks for smaller networks and for Buller Electricity's customers.
783.	NZ Steel	The Authority claims that its proposals are market-like, but the only part of the proposal that is market-like is the AoB charge. The rest is a tax.
784.	Trustpower, Bushnell/Wolak for Trustpower	The Authority has justified its proposals on the basis that they are "market-like" but the Authority has not provided evidence that its proposals are actually market-like.
785.	Entrust, Employers and Manufacturers Association (Northern), MediaWorks, Northpower, Norske Skog	The Authority has not adequately demonstrated why its proposals are better than the status quo, or how its proposals are for the long-term benefit of consumers.

No.	Submitter	Submissions
786.	MEUG, Fonterra, Oji Fibre Solutions, Winstone Pulp International	The Authority is constrained in improving the TPM, because it cannot regulate who should bear the cost of uneconomic assets. If demand continues to decrease, the option of Transpower bearing asset write-offs will start to gather momentum.
787.	Trustpower, Bushnell/Wolak for Trustpower, Professor Yarrow for Trustpower	The Authority is making decisions based on equity considerations, not efficiency considerations. This shows parties that lobbying is effective, making it more likely that the TPM could be "reopened" in response to lobbying in the future. This may cause under-investment.
788.	Meridian Energy	The Authority needs to provide for the HVDC assets that are neither Pole 2 assets nor Pole 3 assets.
789.	Tavia Khaine via Entrust	The Authority should be promoting free sustainable energy.
790.	Transpower	The Authority should consider Transpower's drafting suggestions on the guidelines that were provided in July 2016.
791.	ENA, Alpine Energy, Aurora Energy, Buller Electricity, Counties Power, Eastland Network, Electra, EA Networks, Horizon Energy Distribution, Mainpower, Marlborough Lines, Nelson Electricity, Network Tasman, Network Waitaki, Northpower, Orion, Powerco, PowerNet, Scan Power, The Lines Company, Top Energy, Unison, Vector, Waipa Networks, WEL Networks, Wellington Electricity Lines, Westpower	The Authority should explain how its focus on service-based and cost-reflective pricing is consistent with its proposed guidelines, which are designed to eliminate choices about services received.
792.	MEUG, Fonterra, Oji Fibre Solutions, Winstone Pulp International	The Authority should give Transpower clear directions regarding the nature of the interaction between changes as a result of an operational TPM review and changes as a result of a new TPM.
793.	Buller Electricity	The Authority should provide more information about the specific criteria applied to the five examples presented in Buller's submission, and whether these are akin to a prudent discount or optimisation.

No.	Submitter	Submissions
794.	NZ Steel	The Authority's proposals do not address the issue of under-utilised assets. The Authority has a statutory obligation to act in the best long-term interests of consumers, and therefore should find ways to mitigate this problem.
795.	Northern Federated Farmers	The Authority's proposals do not address the problems that the Authority has identified with the current TPM.
796.	NZ Steel	The Authority's proposals include anti-avoidance mechanisms, which is not economically principled, and may not fall within the Authority's statutory mandate.
797.	Canterbury Employers' Chamber of Commerce	The Authority's proposals will produce fairer and more durable outcomes than the current TPM, and better facilitate economic growth.
798.	NZ Steel	The Authority's refinements paper did not systematically identify and evaluate the risks to TPM durability.
799.	Energy Trusts of New Zealand	The Authority's view that solar energy as a DG option is uneconomic is not realistic.
800.	University of Otago	The charging mechanism should be clear, identifiable, and inclusive.
801.	Otago Chamber of Commerce	The charging mechanism should be transparent, fair, and provide certainty that it adheres to principles.
802.	Energy Trusts of New Zealand	The Commerce Commission's ability to impose penalties for failing to meet national standards for security of supply does not provide a sufficient incentive to improve inadequate security of supply in remote parts of the country. The Authority has not explained how its proposals will produce pricing signals that incentivise Transpower to improve security of supply to those areas. For example, the Authority could negotiate a retention pool with Transpower, in which the Authority holds penalty payments until Transpower improves its service levels.
803.	Pacific Aluminium, New Zealand Aluminium Smelter	The guidelines should be clarified to provide that charges for connection assets must not exceed the revenue allowance for those assets set by the Commerce Commission.

No.	Submitter	Submissions
804.	Pacific Aluminium, New Zealand Aluminium Smelter	The guidelines should require Transpower to review the TPM from time to time, as opposed to merely stating that "it would be desirable" for Transpower to review the guidelines.
805.	NZ Steel	The methodology should be more focused on the end-consumer, which is the stated beneficiary of the law governing the TPM.
806.	University of Otago	The principles of user-pays and service-based pricing should apply to peak-demand periods, no matter when they occur.
807.	Oji Fibre Solutions	The proposed guidelines should be amended so that it is clear that the methodology for calculating charges is based on individual consumers, and not Transpower customers. This will improve perceptions about the equity of the proposed guidelines, and consequently, their durability.
808.	GBC Winstone, Northpower	The proposed refinements do not resolve concerns raised with the second Issues Paper.
809.	ENA, Alpine Energy, Aurora Energy, Buller Electricity, Counties Power, Eastland Network, Electra, EA Networks, Horizon Energy Distribution, Mainpower, Marlborough Lines, Nelson Electricity, Network Tasman, Network Waitaki, Northpower, Orion, Powerco, PowerNet, Scan Power, The Lines Company, Top Energy, Unison, Vector, Waipa Networks, WEL Networks, Wellington Electricity Lines, Westpower	The proposed refinements improve the Authority's proposal, and with further refinements, should give Transpower the scope to develop a workable TPM.
810.	Norske Skog, Counties Power, Counties Power Consumer Trust	The widespread opposition to the Authority's proposals suggests that the proposals will not be durable.
811.	Buller Electricity	There is a major risk of implementation issues, uncertain outcomes, and unintended consequences as a result of the proposal.

No.	Submitter	Submissions
812.	Trustpower	Transpower has raised serious concerns about the Authority's proposals, including: concerns that it has overstated problems with the status quo; concerns regarding options analysis, workability and durability of the Authority's proposals; the risk of unintended consequences; and the prescriptiveness of the TPM Guidelines. Transpower's views have been well considered and backed up by expert opinions. Transpower's views should be reflected in the Authority's proposals.
813.	Entrust, Northland Chamber of Commerce, Northern Federated Farmers, 117 consumers via Entrust	Do not support the Authority's proposals.