NZ AIRPORTS

PROPOSED AMENDMENT TO THE WACC PERCENTILE FOR ELECTRICITY LINES SERVICES AND GAS PIPELINE SERVICES: SUBMISSION ON FURTHER EVIDENCE

30 SEPTEMBER 2014

1. On 19 September 2014 the Commerce Commission ("**Commission**") published an invitation for submissions on certain further evidence relating to its review of the weighted average cost of capital ("**WACC**") percentile for electricity lines services and gas pipeline services. The New Zealand Airports Association ("**NZ Airports**") makes this submission on behalf of Auckland International Airport Limited, Wellington International Airport Limited and Christchurch International Airport Limited (together, "**Airports**").

2. This submission is accompanied by a legal opinion from Russell McVeagh for NZ Airports and the Electricity Networks Association, which forms part of NZ Airports' submission.

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Executive summary

4. The majority of the further evidence and new material referred to in the Commission's invitation paper is specific to the energy sector. However, the material raises some issues of broader relevance, which NZ Airports briefly comments on in this submission, as follows:

   (a) **Professor Dobbs' review of the Frontier Economics submission and model:** Although Professor Dobbs' report is primarily focused on testing Frontier's application of his model to the electricity sector in New Zealand, there are some points of principle that we think are of broader relevance to the Commission's decision on a specific percentile above the mid-point:

      (i) Professor Dobbs makes important points about the balance between consumer and producer interests - a key area of sensitivity in his model. He states that there are real problems with focusing purely on a consumer surplus approach, or with placing greater weighting on consumer surplus more generally. He points out that it may lead to the counterintuitive result in which the regulator assigns a "zero value" to sunk assets.[1] NZ Airports and other submitters have already pointed out the pitfalls associated with a consumer welfare standard - the approach which appears to have informed the Commission's draft decision.

(ii) Professor Dobbs states that his model demonstrates why a WACC percentile significantly above the mid-point is warranted, but notes that there are difficulties in using his model to choose a specific percentile estimate.[2] This caveat - with which we strongly agree - serves to further highlight the importance of the Commission making sure that it has robust evidence before making a decision to depart from the 75th percentile, which is the status quo under the existing IM.

(iii) Professor Dobbs' report highlights additional sources of uncertainty not accounted for in the model, which would tend to increase the up-lift (such as uncertainty surrounding key WACC parameters and demand, and potential technological change that might lead to asset stranding).[3] NZ Airports considers that these observations highlight the dangers inherent in the unduly narrow approach that the Commission has taken to reviewing the appropriate WACC percentile to date.

(b) **Franks & Ogilvie advice to MEUG:** The attached opinion from Russell McVeagh responds to the legal points made by Franks & Ogilvie, but we make some brief comments in this submission from a regulatory perspective. In short, NZ Airports considers that the contentions made by Franks & Ogilvie (that are very similar to those made by BARNZ and MEUG previously) that a workably competitive market benchmark and/or a consumer welfare standard imply that mid-point be chosen, are incorrect.

(c) **Additional evidence relevant to the energy sector:** The Commission has also invited further submissions on additional transactions it proposes to include in its RAB multiples analysis and on network reliability evidence put forward by NZIER on behalf of MEUG. Although NZ Airports does not respond to the technical details of this evidence, we provide our views on several matters of principle raised by this new material.

5. Overall, the new material reinforces our previously expressed views that:

(a) A percentile significantly above the mid-point must be selected;

(b) The 75th percentile is within a reasonable range; and

(c) There is no robust evidence to support the 67th percentile being chosen instead of the existing 75th percentile.

Professor Dobbs' report

6. Professor Dobbs reviews the application of his model by Frontier, including testing some alternatives to the demand curve it applies – particularly the willingness-to-pay parameters. NZ Airports is not in a position to comment on the substance of these parameters or the

[1] Professor Ian Dobbs *Proposed amendment to the WACC percentile for the Allowed Rate of Return: Comments on the Application of the Dobbs [2011] model*, 17 September 2014 (**"Dobbs Report"**), at paragraph 20.
[2] Dobbs Report, at paragraph 24.
[3] Dobbs Report, at paragraph 25.

alternatives explored by Professor Dobbs. However, we note that Professor Dobbs' report is clear that:

(a) Decisions about the value of particular parameters in the model – particularly in the New Zealand energy market context – are outside his expertise;

(b) There are unanswered questions surrounding the extent to which the model (which was designed with telecommunications services in mind) can reasonably be applied to electricity and gas distribution, given the rather less crisp distinction between investments in "existing" services and "new" services (as we note below, investments in airport services are different again);

(c) Even if such a model could reasonably be applied to electricity and gas distribution services (which is unclear), there is an open question about how much quantitative significance could in any case be placed on its predictions when choosing an allowed rate of return/specific percentile estimate, given the many other intrinsic sources of uncertainty that Professor Dobbs highlights; and

(d) Ultimately and, in our view, quite tellingly, Professor Dobbs does not feel sufficiently well placed to make a judgement about whether the percentile should be higher or lower than the current choice of the 75th percentile (and/or higher or lower than the 67th percentile).

7. In light of these qualifications, in our view the key points that arise from Professor Dobbs' report are as follows:

(a) Professor Dobbs' explains that his model can clearly articulate *why* a significant up-lift on the mid-point WACC is required, but that it is unclear how much *quantitative significance* should be placed on the model predications. Professor Dobbs seems essentially to be saying: "my model can show you that a significant up-lift is required, but not necessarily tell you how much it should be". In our view, this serves to further highlight the importance of the Commission making sure that it has robust evidence before making a decision to depart from the 75th percentile – the status quo under the existing IM;

(b) A key sensitivity in the model is the choice of welfare standard. There are problems associated with any move away from a total welfare standard (i.e., an approach that places equal weight on consumer and producer surplus), and the problems associated with a pure consumer surplus approach (i.e., an approach that places zero weight on producer surplus) are so drastic as to render it untenable. Professor Dobbs explains that: [4]

(i) The original results of his model were based on an unweighted "consumer surplus plus profits" welfare criterion.

(ii) Regulators typically weight consumer surplus more highly than profits – an approach that he does not personally advocate. It is important to cover the range of weightings by way of sensitivity analysis.

(iii) There is a real problem with focusing purely on consumer surplus within this type of model and ignoring entirely the profit component of economic welfare (i.e., placing zero weight on producer surplus).

[4] Dobbs Report, at paragraphs 19 to 35.

(iv) Focusing purely on consumer surplus would imply assigning a "zero value" to existing sunk assets – a highly counterintuitive outcome.[5] He observes that even placing a comparatively greater weight on consumer surplus (but a non-zero value on producer surplus) essentially amounts to expropriating a share of existing sunk assets. In his view, this would risk breaching the regulatory "compact" that is about building trust that a fair return will be earned on assets once irreversible investments are made.

(v) He is consequently concerned about putting greater weight on consumer surplus as a mechanism for generating a lower predicted rate of return.

(c) There are potentially significant additional sources of uncertainty not incorporated in the model, which should be accounted for when considering the appropriate WACC percentile. For example, Professor Dobbs notes that:

(i) Estimating WACC is a theory-laden process with scope for different players to take a different view on WACC and to be uncertain regarding any point estimate, which arguably increases the rational for a material up-lift.[6] Professor Dobbs notes that his views on this point align with advice that Dr Lally has previously provided to the Commission.[7]

(ii) There are likely to be significant additional sources of uncertainty that arise because there is uncertainty (both on the part of firms and the regulator) about the initial scale and rate of growth of demand for different categories of investment. Professor Dobbs notes that these sources of uncertainty should in principle be taken into account, and could be approximated through an up-lift in WACC if they are not accounted for elsewhere.[8]

This reinforces NZ Airports' previous submissions that the review of the appropriate percentile choice must extend more broadly than a narrow consideration of whether there is an asymmetry in social costs. It must also encompass sources of uncertainty that affect the mid-point WACC itself, the WACC distribution and sources of asymmetric cash-flow risk. Otherwise, the Commission will not get the right answer.

(d) Professor Dobbs also notes there is a question of "goodness of fit" in the context of electricity and gas distribution, where investments are primarily increasing the reliability of existing networks, instead of providing a "new" service.[9] If the Commission decides to carry out further work on the WACC percentile for airports, it will be important to recognise that investment in airport infrastructure can be quite different in nature from energy networks. In particular, airport investments such as a new runway, improvements to an existing runway to cater to new (bigger) aircraft, and terminal expansions and upgrades can create new demand and improve the ability to meeting increasing demand.

8. Overall, NZ Airports found the Dobbs report to be helpful. We read it as saying:

(a) A percentile significantly above the mid-point is warranted;

[5] This point is made by both Dr Lally and CEG in their respective critiques of Covec's proposed welfare standard. See Martin Lally *The Appropriate Percentile for the WACC* Estimate, 19 June 2014, at page 15, at paragraph 4; CEG *Economic Review of BARNZ and Covec*, September 2014, at pages 3 to 14.

[6] Dobbs Report, at paragraph 24.

[7] Lally Report, at page 13, at paragraph 4.

[8] Dobbs Report, at paragraph 25.

[9] Dobbs Report, at paragraph 27.

(b) Modelling of an "optimal" percentile will always be subject to sensitivities and uncertainties, and therefore should be treated with some caution; and

(c) All uncertainties that impact on the percentile choice (and which tend towards a greater up-lift) should be considered.

Franks & Ogilvie advice

9. Franks & Ogilvie have advised that the Part 4 purpose statement requires the Commission to use a consumer welfare standard only, and that the outcomes in limbs (a) to (d) of the purpose statement do not allow the Commission to depart from its mid-point estimate of the WACC. In addition to the comments made in the attached legal opinion from Russell McVeagh, NZ Airports notes that:

(a) The Commission has tested the Court's tentative comments. The overwhelming weight of the evidence provided as part of the current review supports addressing asymmetric social costs of underinvestment by choosing a percentile substantially above the mid-point. Compelling evidence has also been put forward that a consideration of the broader issues that are relevant to the WACC percentile also support a choice at or above the 75^{th} percentile estimate. The High Court expressly recognised that further work by the Commission could result in the status quo percentile choice, so we do not see how the Commission can be legally required to choose the mid-point. MEUG (as with BARNZ) has not put forward evidence to rebut the evidential support for a percentile choice significantly above the mid-point, and therefore has not taken its position any further than put to the High Court.

(b) Arguments that the mid-point estimate is the only choice that is consistent with the purpose statement misconstrue how the purpose statement applies to the choice of regulatory WACC. This is the case irrespective of whether those arguments rely on a particular interpretation of the "workably competitive markets" standard, or on the application of a specific welfare standard:

(i) The reference to workably competitive markets does not mandate a choice of the mid-point estimate. As we have set out previously, the issue under the purpose statement is how to set a regulatory WACC that produces workably competitive market *outcomes*, such that objectives (a) to (d) of the purpose statement are promoted. The Commission's (correct) interpretation has always been that a percentile estimate substantially above the mid-point is necessary to produce a regulatory WACC that provides confidence of an expectation of normal returns. That is, returns sufficient to promote investment and ensure that regulated suppliers are limited in their ability to extract excess profits (the relevant outcomes you would expect to see in a workably competitive market over time).

(ii) The debate about consumer welfare and total welfare is relevant to the extent that it helps with the real issue: striking the right balance of supplier incentives such that objectives (a) to (d) of the purpose statement are likely to occur, thereby promoting the long-term benefit of consumers. As has been explained comprehensively in a large number of submissions and expert reports (including the latest advice from Professor Dobbs), “pure consumer surplus” standard is untenable, because it risks under-recovery by firms that will ultimately harm consumers in the long run. That would clearly be inconsistent with the purpose of Part 4, which is, ultimately, to promote the long term interests of consumers.

Additional evidence relevant to the energy sector

10. The remaining material referred to in the Commission's invitation paper can be dealt with relatively briefly. NZ Airports wishes to make the following points:

(a) **Contextual evidence on further transactions that may be relevant to the Commission's RAB multiple analysis:** NZ Airports is not in a position to comment on the nature of these transactions or their factual relevance to the Commission's analysis for the energy sector. However, as set out in our previous submissions, we (along with other regulated suppliers, infrastructure investors, and economic experts - including experts providing advice for consumer groups) have a number of concerns with the validity of the Commission's RAB multiple analysis as a tool for making decisions about the appropriate WACC for regulated businesses.

It appears that RAB multiples, and the range of reasons for multiples in excess of 1, are not well understood.[10] Further, as NZ Airports (and CEG) has noted, overseas regulators have expressed considerable caution about the use of RAB multiples in regulatory decision making. These concerns cannot be addressed by the potential addition of one or two additional examples to the Commission's set of reference points, and we urge it to be very careful before using this type of analysis to support a departure from the current IM.

(b) **Recent reports by NZIER on behalf of MEUG:** These reports focus primarily on network reliability in the electricity sector, i.e., the likely number and effect of supply outages, and the value of reliability to energy consumers. There is little that NZ Airports is able to add to that debate. However, if the Commission proceeds with its proposal to consider amending the WACC range for airports, then there will be different considerations for any such cost/benefit analysis, including that:

(i) Investment in the airport sector can have much broader effects than simply improving "reliability". Consumers, particularly passengers, can derive many potential benefits from efficient levels of investment in airport services. These benefits include:

(aa) reductions in the time of travel (including reduced processing times for passengers, improved baggage delivery systems, and quicker turnaround times for flights), delivering greater benefits for both airports, airlines and passengers;

(bb) the ability of increases in airport capacity to enable airline growth, competition and attract new airlines, leading to reductions in the cost of travel for consumers and increases in destination choice;

(cc) the quality of airport services, including the quality of passenger experience (including features such as ambience of the airport environment, ease of way finding, connectivity between terminals and flights);

(dd) industry and network efficiencies for consumers of airport services (for example, airport investment can affect performance

[10] For example, NZIER has cautioned that the Commission should be careful not to apply a false level of precision by using these multiples to justify a reduction in the WACC percentile, especially when the Commission admits there is little understanding about the drivers of the apparent RAB premium. Further, NZIER has stated that it would be prudent for the Commission to accept that "there are too many unknowns and that these approaches should not be relied upon to support a quantitative decision": NZIER *Changing the WACC percentile: Advice to MEUG regarding Commerce Commission proposal to amend the regulatory WACC for electricity line & gas pipeline services*, 29 August 2014 at pages 20-21.

and outcomes for airlines, customs and MPI officials, and well-designed investment can drive efficiencies and tangible benefits for these key links in the aviation value chain); and

(ee) the safety and security of airport services.[11]

(ii) The regulated airports (and New Zealand's airports more generally) enable important international and domestic connections that facilitate a number of broader economic activities and provide a critical link in driving value in the key tourism and international trade markets.

(iii) In other words, a focus on supply interruptions and the value of reliability investment to consumers will be just one part of a necessarily broader story when thinking about the wide range of benefits that investment in airport infrastructure delivers to airlines, passengers and other key stakeholders in the airport value chain.

[11] Which will also be influenced by the regulatory framework under the Civil Aviation Act.