Authority responses to Major Energy User Group (MEUG) questions on 16 December 2013

Avoided Cost of Transmission (ACOT) working paper

10 January 2014

The following sets out the Authority's responses to questions by MEUG on the ACOT working paper. The questions were put to the Authority by email on 16 December 2013.

MEUG: *Can the EA comment on the following? This will assist our understanding of the ACOT working paper:*
[Question 1] *Does the EA see any distinction between DG that does not have any load associated with it (eg wind farm, small hydro) and cogeneration where generation and load are linked both physically and process wise? As background to this question note:*
a) The paper appears to focus on generation that is not associated with a particular load. Are the discussion and preliminary conclusions applicable to generation and cogeneration physically linked with load?
b) The Part 1 definitions of distributed generation, cogeneration and embedded generation stations are not clearly distinguished. The lack of precisely defining under which Part 1 definition assets are treated is reflected in some corrections required to Appendix 3.

Authority's response to question 1:
The Authority's 2012 TPM proposal did not distinguish between standalone distributed generation and distributed generation physically linked to load. The beneficiaries-pay working paper will consider whether there should be any distinction between treatment of generation supplying a specific load and generation that does not have any load specifically associated with it. The beneficiaries-pay and residual working papers will also explore the relative advantages of net load over gross load in calculating beneficiaries-pay and residual charges.

[Question 2] *There seems to be a very wide range of payments by distributors when looked at on a $/MW installed pa basis. Could the EA provide a little more information on the "other payment information" column in appendix A?*

Authority's response to question 2: The analysis was undertaken with available information from electricity distributors' information disclosures provided to the

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Commerce Commission. That information, up to 2011, indicated that approximately $34 million in ACOT payments were made. Noting that the Transpower interconnection rate for 2011/12 was $76.14/kW, that would imply payments were made for 444 MW of capacity (using the simplifying assumption that all payments were made at that rate).

However, the Authority noted that some distribution companies had included different values in their pricing methodology or other publications. These are also shown in Appendix A and highlight that some distributors did not include a figure, while other distributors indicated substantially higher payments. For instance, the Commerce Commission disclosure indicated Aurora made payments totalling $1.250 million while information from the company indicated they actually pay closer to $6.600 million. Using the disclosure information to fill in the missing values added a total across all distributors of $6.42 million bringing the indicative list of payments to $49.96 million.

Subsequent to the above analysis, the Commerce Commission released its summary database of electricity disclosures for 2012. This latest data identifies $45 million in ACOT payments. Transpower's interconnection rate for 2012 was $90.66/kW, which suggests 496 MW of capacity received payments (again using the simplifying assumption that the payments are at the interconnection rate).

As Transpower's interconnection rate for 2013 ($99.44/kW) is higher than the 2012 rate, a simple calculation on the 496 MW of generation implies payment would be $49.4 million. Taking the higher of the Commerce Commission disclosed values and other publically available information suggests the payments could be $52 million in the 2013/14 year.

[Question 3] *Has the EA considered whether there are any reductions in line losses (apart from considering nodal price changes) as a result of distributed generation?*

Authority's response to question 3: The Authority considered loss reduction benefits on distribution lines in section 11.8 of the working paper. The Authority has not attempted to quantify loss reduction benefits on distribution lines in the working paper and welcomes submitter views on the size of these benefits.

[Question 4] *Paragraph 1.12 states "... $50 million will be paid to 766 MW of qualifying generation during 2013/14." Appendix A reports disclosed ACOT payments for 2011 total $33.8m (p46) and the trend was down from the prior year. The difference may be due to different time periods but we're not sure why that would make such a difference and seems counter to the trend in appendix A. Can the EA reconcile the two estimates?*

Authority's response to question 4: Please see the Authority's response to question 2 which provides detailed information around the values used in Appendix A.

[Question 5] *In some scenarios should ACOT policy change there will be wealth transfers from existing DG owners. Some transfers will accrue to consumers but will there be a risk of network companies not fully passing benefits through to consumers? eg A 1MW base load unit operating at say 6,000h/y would earn say $600k/y electricity and up to $100k/y ACOT income - a 15% drop. Is the EA analysing potential wealth transfer implications?*

Authority's response to question 5: Commerce Commission regulation provides for ACOT payments to be recovered by distributors from customers. i.e. it is classified as a recoverable cost. Under recoverable cost methodology, a distributor is required to seek Commerce Commission consent before recovering ACOT from customers. If a distributor's ACOT payments decrease, the quantum of recoverable costs proposed by that distributor would decrease.

[Question 6] Comments on Appendix C of the working paper

Details from appendix C of working paper on ACOT								
name	Owner name	Generation type	Capacity	Station name	Owner name	Distributor	Whether the distributor pays ACOT	page
Kawerau - CHH	Carter Holt Harvey	Cogeneration	27	Not given	KAW0111	Horizon Energy Distribution	Pays ACOT	51
Pan Pac	Pan Pac Forest Products	Cogeneration	12.8	2005	WHI0111	Unison Networks	Pays ACOT	61

MEUG comments on Kawerau: Cogeneration is direct connect to grid and does not receive ACOT payments from HEL. CHH at Kawerau pay transmission charges on net load generally per Schedule 12.4 of Part 14.
MEUG comments on Pan Pac: Cogeneration is connected to grid. Confusion may have occurred because Pan Pac does have a small river pumps connection to Unison; but that is nothing to do with main site and cogeneration connected to grid.

Authority response to question 6: The Authority will update its database to reflect MEUG's information that the two generators listed above are grid connected, and not distributed generators.

The column "Whether the distributor pays ACOT" was not intended to identify whether each distributed generator that received ACOT payments. This information was not available to the Authority. The term "Whether the distributor pays ACOT" was intended to indicate whether the *distributor* that the respective distributor generator is connected to pays ACOT. This was determined by examining whether the respective distributor discloses to the Commerce Commission that it pays ACOT, using Appendix A information. We apologise for any confusion this might have caused.