

22 June 2021

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Submissions
Electricity Authority
PO Box 10041
Wellington 6143
By email: WholesaleConsultation@ea.govt.nz

Re: Levy consultation: Commercial Market-Making Scheme

Nova Energy fully supports the introduction of a levy funded commercial market-making scheme.

On balance, and based on the costings provided, the proposal to specify a volume of 12 MW and spread of 3% provides the greatest benefit / cost ratio of the range of options specified. As such, Nova supports the appropriation of \$14.4m or thereabouts to give that effect.

Nova's view is based on the following quantitative analysis:

a) Interpolation of the costs of different options

The following table is an interpolation of the expected costs of different combinations of volume and spread given the data supplied by the Authority. While only approximations, the data provides a useful measure of relativity between the different combinations.

Cost \$m	2%	3%	4%	5%
8 MW	\$ 22.60	\$ 11.50	\$ 10.94	\$ 10.46
10 MW	\$ 25.35	\$ 12.90	\$ 12.27	\$ 11.36
12 MW	\$ 28.30	\$ 14.40	\$ 13.70	\$ 13.00
14 MW	\$ 37.54	\$ 19.10	\$ 18.17	\$ 17.24
16 MW	\$ 43.43	\$ 22.10	\$ 21.03	\$ 19.95

b) Comparative benefit of the different options

The estimated benefit of each of the alternative combinations has been determined by the simple arithmetic ratio between the volumes and spread percentages. There may be an argument to say that the benefits of a spread of 2% is more than double a spread of 4%, but that would be difficult to verify.

Benefit	2	3	4	5
8	4.0	2.7	2.0	1.6
10	5.0	3.3	2.5	2.0
12	6.0	4.0	3.0	2.4
14	7.0	4.7	3.5	2.8
16	8.0	5.3	4.0	3.2

Note that the ratio between the benefit measure for most expensive option (16MW/2%) and the least expensive (8MW/5%) is 5x, i.e. 8.0 / 1.6.

c) Benefit / cost ratio

The table below simply divides the Benefit (table b) by the Cost (table a).

Benefit ratio (\$16m, 2% / \$8m,5%):				5.00
CBA	2%	3%	4%	5%
8 MW	0.18	0.23	0.18	0.15
10 MW	0.20	0.26	0.20	0.18
12 MW	0.21	0.28	0.22	0.18
14 MW	0.19	0.24	0.19	0.16
16 MW	0.18	0.24	0.19	0.16

It is apparent from this table that the optimal spread is 3%, and with that, a volume of 12 MW provides the greatest benefit / cost ratio.

d) Sensitivity analysis

Sensitivity analysis of the above calculations considers the scenarios where the relative benefits of the different options are scaled, both lower and higher. The first table illustrates the benefit / cost ratio when the benefits of the most expensive option are just 3x the least expensive:

Benefit ratio (\$16m, 2% / \$8m,5%):				3.00
CBA	2%	3%	4%	5%
\$ 8	0.11	0.17	0.15	0.13
\$ 10	0.12	0.18	0.15	0.14
\$ 12	0.12	0.18	0.15	0.14
\$ 14	0.10	0.15	0.13	0.12
\$ 16	0.10	0.14	0.12	0.11

The second table illustrates the relativity where the benefit / cost ratio between the most expensive option (16MW/2%) and the least expensive (8MW/5%) is 7x:

Benefit ratio (\$16m, 2% / \$8m,5%):				7.00
CBA	2%	3%	4%	5%
8 MW	0.24	0.28	0.21	0.17
10 MW	0.28	0.33	0.25	0.20
12 MW	0.31	0.37	0.28	0.22
14 MW	0.28	0.34	0.25	0.20
16 MW	0.28	0.34	0.25	0.20

It is apparent from the sensitivity analysis that the pairing of 12 MW and 3% is still the preferred option.

Whichever volume is selected, the 3% spread still provides a greater benefit / cost ratio than the other spread possibilities.

As a second option, the 10 MW, 3% combination is preferred based on the next best benefit / cost ratio. The cost reduction between the 10 MW and 14 MW options is not insignificant. Ranking 3rd – 5th respectively: 14MW, 16MW, 8MW, each with a 3% spread.

Nova believes that adding commercial market makers has two primary benefits:

- It sets a value on market making services that when levied across the industry, levels the playing field for all market participants, and
- It adds an additional commercial intensity to the market. A commercial market maker will be sensitive to any suggestions of unacceptable trading conduct in the market and could be expected to bring any suspected cases to the attention of the Authority.

I am available to discuss this issue in more detail and can provide the Excel workbook used to prepare the tables above if requested.

Yours sincerely



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