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Submission to True Value of Distributed Generation Inquiry - Proposed Approach Paper

Commission's approach

Q1.

Do you agree with how the Commission is proposing to define true value? If not, why not? Are there other definitions the Commission could use?

Partially.

I disagree with the 'Simplicity' requirement that identified benefits must be readily convertible into a payment structure that is simple to understand and administer by all relevant market participants.

Firstly, there may well be other methods of achieving recognition of value than a payment structure. These should not be a priori discarded. Suggest a wording that "identified benefits must be readily convertible into tangible form, for example a payment structure".

Secondly, while simplicity may be preferred, it should not be preferred at the expense of function, i.e., it should be as simple as possible but no simpler. In particular, in regard to micro-generation, many participants are technically literate; options that trade complexity for better recognition of value should at least be considered as optional components complementing simpler processes.

Q2.

Do you agree with the Commission's view that this Inquiry is focused on identifying the public benefit of distributed generation? If not, why not?

Yes.

Q3.

Do you agree with how the Commission is proposing to define public benefit as it relates to distributed generation?

Yes in so far as it distinguishes between public and private benefit.

However, I disagree with the paper's relegation of 'social benefits' through the use of a question mark in the table in Box 1.

The paper should make more effort to elaborate on the meaning of 'social benefit' in this context. For example, are the public health benefits of reduced particulate emissions (or indeed, in the case of distributed diesel generators, increased particulate emissions), or the avoidance of the release of radioactive and chemically toxic heavy metals into the environment social benefits with an in-principle quantifiable value ?

Q4.

Is the Commission's understanding of how the costs, to network businesses and consumers, of connecting distributed generation are calculated and recovered correct? If not, why not?

Since this section concludes with "the Commission will assume, for the purposes of this inquiry, that the costs ... are already accounted for" why is this question asked ?

Q5.

Do you agree with the Commission's proposed approach to the inquiry? If not, why not, and what alternative approach would you propose?

The Commission proposes a series of further discussion papers, draft reports and final reports, but it does not make clear whether these reports will be public or whether further discussion papers and draft reports will be open for comment.

I do not agree with the proposed approach if the documents are not to be made public or available for comment.

Definition of distributed generation

Q6.

Do you agree with how the Commission is proposing to define distributed generation? If not, why not?

Mostly; however, the approach does not distinguish between polluting and non-polluting forms of distributed generation. Many of the benefits of much, but not all, distributed generation accrue from avoided external costs (other than greenhouse gas emission which is considered elsewhere in the paper), especially of brown-coal fired electricity generation.

Q7.

Are there other definitions of distributed generation the Commission could consider?

The Commission should consider a distinction between forms of distributed generation that have significant externalities other than greenhouse gas emissions (which are treated separately) and those that don't. The reason is that many forms of distributed generation, the renewables as well as efficient gas turbines, have generally much less health or other impacts than the central brown coal generators, and so can be given a value for their avoidance. However some, such as diesel or wood-fire generation do not. One could include mine fire risks, toxic and radioactive residues from coal burning etc., all as real costs that can be avoided.

It may be that the best solution is a special or separate treatment of diesel, wood-fire and other more polluting distributed generation methods, to enable a properly rational economic treatment inclusive of such external costs.

What values can be attributed to distributed generation

Q8.

Are there other public benefits that the electricity generated by a distributed generator provides? How can these identified benefits be quantified?

Discussed at Q7.

Q9.

Are there any environmental or other public benefits that a distributed generator provides to the distribution network? How can these identified benefits be quantified?

Incorporation of distributed generation technologies in the planning for the mitigation of bush-fire risks could provide significant cost reduction, for example, through the use of underground cables of lower capacity in conjunction with battery storage. In rural areas with long, thin networks, for example irrigation areas with significant use of pumps, distributed generation when incorporated into network design, can significantly reduce overall energy costs to farmers when both network infrastructure and energy costs are considered holistically. Given the public subsidies often provided to infrastructure in such circumstances, the role of distributed generation is likely to become more and more significant.

Regulatory framework

Q10.

Are there particular aspects of the current regulatory framework outlined in this paper that the Commission should consider when evaluating the adequacy of the current Victorian policy and regulatory frameworks governing the remuneration of distributed generation?

Yes.

The current regulatory framework has at least one very significant deficiencies with major implications for distributed generation investment:

The major capital investment made by all consumers in the purchase and installation of Smart Meters has manifestly not resulted in any significant return on investment to consumers despite the very real and valuable opportunities for some that they provide. This is a major delinquency of regulation that is also very significantly limiting the return on investment in distributed generation through preventing innovative means for providing tangible recognition of value and artificially preserving unwarranted economic rents. All consumers should have the right to read their meters at least at half-hourly intervals, and to delegate that right to small business, start-ups, cooperatives and social enterprises.

Q11.

What is the impact of the current regulatory framework on the valuation of distributed generation in Victoria? In particular, what has been the scale and scope of support provided to distributed generators by: avoided TUOS payments, avoided DUOS payments, Network Support Payments, the Distribution Network Pricing and Assessment Framework, and the RIT-D?

No comment.

Key issues for the inquiry

Q12.

Do you agree with the Commission's proposal to develop a methodology for calculating the time-of-use benefit of the electricity produced by a distributed generator? If not, why not?

In principle yes, but I would prefer some method that finds a contestable value for produced electricity based on the half-hour intervals. The fundamental data on which this could be based - each consumer's exported power meter reading - is readily available and not significantly large either in total data volume or communication bandwidth requirements (it is, after all, read by the retailers.) Allowing for distribution losses, the whole-sale price of electricity at each property entry point can be readily calculated at half-hourly intervals. Each retailer can make offers recognising that value according to retail market competitive

conditions, and each current or prospective distributed generator can adjust their systems to maximise their returns.

Q13.

Which of the two time-of-use options presented do you favour?

The more granularity the better.

Q14.

Are there other time-of-use options that the Commission could consider?

The more granularity the better.

Q15.

Are there other methodologies for calculating the locational benefit of distributed generation?

The Commission should seek to provide the greatest possible exposure to real, local market drivers rather than try to calculate regulated recognition of value and benefits.

Q16.

Do you agree with the Commission's view that the environmental benefit of distributed generation may be sufficiently reflected in the payments available under the RET? If not, can you provide evidence to detail what environmental benefits of distributed generation are not already captured by the RET scheme and how they can be valued?

No.

The discussion paper gives insufficient consideration to environmental and social costs other than greenhouse gas pollution. While the RET schemes do provide some recognition of the greenhouse gas external costs, they do not adequately reflect avoidance of other environmental and social costs and risks.

Q17.

Are there other methodologies that the Commission could consider for calculating the carbon benefit of distributed generation technologies that are not covered by the RET?

I disagree with the premise that the Commission should calculate a benefit. The Commission should concentrate on methods of allowing consumers and investors in distributed generation to achieve better mutual recognition of their greenhouse gas abatement.

For example, what can the Commission do to enable and facilitate the creation of small business, start-ups, cooperatives or social enterprises based on the local sharing of distributed generation? For example, on a small scale, a group of neighbours connected to

one sub-station forming a cooperative to sell and buy exported power to each other at a mutually agreed price or fraction of the market price, calculated at half-hourly intervals? It entails very simple arithmetic. They would strike a deal with a retailer or even the distributor for net imports averaged over the group, with net exports likely to be little if any.

Or what can the Commission do to enable and facilitate a sub-market in coal-free electricity? Many, many people who currently pay for greenpower would consider paying even more for coal-free power, i.e., power demand calculated in each half-hour, rather than averaged over two full months with many periods when their power is actually coal-fired even though it is offset at other times of high renewable availability. Such a sub-market would commercially value individuals' choices not to support coal-fired generation at all and to create more demand for distributed renewable electricity.

Q18.

Do you agree with the Commission's proposal to undertake further analysis into the economic benefit of distributed generation to distribution networks? If not, why not?

Yes.

Q19.

Do you agree with the proposal to focus this analysis on the three pieces of analysis highlighted? If not, why not?

No. Their scope is too limited. The Commission should commission at least one other independent analysis that considers broader opportunities arising from technical possibilities, for example smart meter access derestriction and demand-side management.

Q20.

Is there other analysis that might be helpful to the Commission in considering the economic benefit of distributed generation to distribution networks?

Surely.

Conclusion

In addressing the complexity of these issues, the Commission should not lose sight of the household consumer's simplistic perspective: the increasing disparity between the prices of imported and exported electricity, i.e., exported at the 5c FiT and sold with no value added by the retailer to their neighbours at a 400% markup, is a startling and unsustainable absurdity.

Similarly, the incredible waste of opportunity of the smart meter roll out is also a startling and unsustainable absurdity.

They must be fixed.