Major Energy Users Inc.

MCE SCO

Review of DSR and DG

Response to NERA Recommendations

by

The Major Energy Users Inc

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Table 1.1
Summary of potential DSR and DG incentive barriers – revenue and pricing Rules - MEU Response

Stage of regulatory Process / rules	Potential barrier *Materiality 1*	Recommendations	MEU Response
1. Form of regulation	For smaller scale DG the costs of regulatory specific arrangements will outweigh the benefits of tailored connection/use terms and conditions. *Moderate – will depend upon the size of the DG proponent and so the extent of countervailing power.*	The Rules should require that, once the appropriate form of regulation is determined for domestic distribution use of system charges, DNSPs should be required to allow such customers to install and use PV on the basis of the same usage and capacity tariff elements applying to equivalent sized load.	Agreed and supported. However care is needed to ensure that this right is not abused. It is suggested that the limit on this right be limited to no more than a nett zero import of power by any one consumer.
2. Control setting method	Recognition of network support payments as an expenditure item in building blocks cost build-up. *High – for network support to be an economic alternative to network assets (for DNSPs), it must be adequately recognised in regulated costs.*	Provision in the Rules for the inclusion of payments made by DNSPs for 'network support' expenditure in the derivation of the building block revenue requirement should be retained. The method for recognising network support payments in the derivation of the building block revenue requirement should provide unbiased incentives for the efficient substitution of network support for network augmentation.	Agreed and supported. The payments should be hypothecated to beneficiaries.

	Preference for capex over opex due to regulated WACC being greater than DNSPs' actual or perceived WACC. *Moderate – will depend upon the extent of any WACC estimation error/bias.*	The revenue rule approach to WACC determination should avoid creating systematic upward bias in the WACC. Equally it should not create systematic downward bias, either for the purpose of balancing DSR and DG incentives or any other reason.	Agreed and supported. Should be consistent in principle to the Expert Panel's view on the "propose and respond" model regarding the WACC so as not to have an upward bias in favour of the access arrangement applicant over time.
	Efficiency benefit sharing mechanisms are more difficult to apply to capex than opex, leaving less pressure to minimise capex. *Moderate – regulatory treatment of DSR/DG costs and other network costs should be balanced for relative incentives not to be distorted.*	The range of regulatory measures available to address the potential imbalance of incentives as between capital and operating cost expenditure should include: ▪ allowing (but not requiring) the AER to include a capital expenditure efficiency incentive mechanism in the building blocks control setting method for individual DNSPs; and ▪ requiring the AER to consult on the potential DSR and DG incentive implications of any proposed operating or capital expenditure efficiency incentive mechanism.	Regard needs to be given to opex savings resulting from new capex and to the expected increase in productivity gains. This power should be provided to the AER by way of the AER establishing guidelines, which should be exposed for public consultation
	Management predilection for investment in own assets so as to grow business and/or reinforce market power. *Low – occurs in all industries and markets.*	The distribution revenue rule should include operating and capital expenditure assessment criteria that require the AER to be satisfied that the forecast expenditure reasonably reflects efficient non-network alternatives available to a DNSP.	Agreed and strongly supported

3. Regulatory test	Two path regulatory test creates possibility for greater market benefit options (eg, non-network) to be disadvantaged relative to cheaper NPV cost network options. *Low to Moderate – the extent of this problem is not clear, and has to be balanced against the greater complexity of the market benefits limb of the regulatory test*	No recommendations – to be addressed as part of network extensions/expansions review.	Agreed. This issue is significant. The selection of the discount rate has the ability to change a decision from one option to another. It is suggested that the discount rate should be related to a consumer viewpoint. Consumers effectively see cost changes in relation to CPI. The difference in perceived "reliability" between options is also used to support network options
4. Service incentives	Service incentive schemes may give rise to motivation for greater use of network solutions to constraints. *Moderate to high – will depend upon the scale/scope of rewards/penalties and specification of service standards/targets*	Where the perceived 'firmness' of DSR and DG present a potential barrier to their efficient uptake by DNSPs, the Rules should not prevent DNSPs from entering into service contracts with DSR and DG service providers that transfer the relevant service incentive scheme payments and penalties to such providers. The potential DSR and DG incentive impacts of service incentive schemes should be considered by the AER when specifying the operational detail, service targets and applicable penalties and rewards for such schemes. This may be achieved by including this as a principle under the initial distribution rule (equivalent to clause 6A.7.4 of the transmission rule).	Agreed and supported Agreed and supported

5. Form of price control	Revenue control provides incentive for DSR and DG on DNSPs but not customers. Price cap provides incentive for DSR and DG on customers but not DNSPs.	Price caps should be preferred over revenue controls for the purpose of facilitating the utilisation of DSR and DG, particularly once advanced meters and the easing of side constraints improve the opportunity for more efficient forms of pricing. That the Rules should permit the AER to establish an incentive mechanism that compensates DNSPs operating under the price cap form of control for the revenue lost as a consequence of undertaking efficient DSR initiatives.	Agreed. Price caps also provide an incentive to DNSPs to manipulate tariffs to maximise revenue. Thus tariffs set under a price cap regime will be affected by the DNSP setting tariffs to maximise revenue rather than to reflect costs for providing the service. The AER should be required to develop guidelines and expose them for public consultation.
6. Pricing Principles	Prudent discounts – there is potential for discounting to be efficient (ie, avoid inefficient bypass) or to be inefficient (dissuade efficient bypass). *Low – mitigated by revenue sufficiency risk* Side constraints – existing constraints limit DNSPs' ability to set tariffs that reflect the economic costs of service *High – even where DNSPs' incentives are well aligned, efficient outcomes may be prevented.*	The initial distribution rules should not prevent DNSPs from offering prudent discounts. The requirement for the periodic review of side constraints should be retained in the initial Rules.	Supported, as prudent discounts can benefit all other consumers. However there needs to be controls to ensure that the discounts offered are prudent (ie recover more than the avoided costs). Strongly supported. Side constraints are distortive and prevent cost-reflectivity of tariffs. They also lead to discrimination against particular customer or tariff classes.

	Tariff reassignment – obsolete or anomalous tariffs are restricted from closure. AMI tariffs not able to be mandated. *High – even where DNSPs' incentives are well aligned, efficient outcomes may be prevented*	Where tariff reassignment restrictions are to be included in the Rules, these should be limited to principles that ensure tariff assignment and reassignment is based upon: ▪ customers' usage and connection characteristics, ie, the drivers of network costs; and ▪ providing equal treatment to customers with similar usage and connection characteristics.	Agreed and supported
		DNSPs should be required to reassign customers to a time of use tariff following installation of advanced metering infrastructure at a customer's connection point.	Agreed and supported
		Reassignment should be accompanied by a requirement for customer education regarding ways in which they can manage their demand to affect their bill. Further work is required to identify whether this is a role best served by retailers or DNSPs.	Agreed and supported
	Geographic tariff averaging prevents DNSPs from sending efficient pricing signals.	The initial Rules should not include requirements for geographic tariff averaging, and instead leave such decisions to the discretion of DNSPs, subject to compliance with generic principles for efficient pricing. Any jurisdictional variation agreed under the AEMA should be handled through the derogation process.	Partially agreed. • Cost reflective tariffs are consistent with economic efficiency requirements for network costs allocations. • However, DNSPs are incentivised to develop tariffs which enhance revenue rather than be cost reflective. Price setting guidelines need to prevent deliberate biasing by the DNSP and to

	Capacity charging – currently no rule requirement for DNSPs to review and reset capacity charges following sustained customer maximum demand reductions, this may create disconnect between customers investing in DSR or DG, and realising financial benefits of lower network charges. *Materiality varies by jurisdiction:* *Low – where policies/procedures published* *High – where no policies/procedures published and customers are thereby limited in their ability to realise network cost savings*	DNSPs should be required to submit to the AER for approval and publish protocols for the assessment and review of capacity demand and determination of capacity charges including: ▪ the period over which capacity demand will be reassessed before capacity charges are reset (say, every 12 months).	provide maximum cost reflectivity Agreed. Currently DNSPs have the view that they have provided assets to meet the maximum demand of each consumer. Once built these assets are "sunk". DNSPs often use a "ratchet" mechanism to set demand. The contract demand is set at the maximum demand of a consumer. This is set immediately the contract demand is exceeded. This new contract demand can only be reduced after 12 months, and only if the consumer can prove that a reduction is permanent.
7. Competitive neutrality in generation	Negotiation arrangements for DG connection and usage charges gives rise to potential for inequitable regulatory treatment of distribution connected generators relative to transmission connected generators. *Moderate to high – will depend upon the size of the DG proponent and existence of countervailing power.*		This issue is vexed and is dependent on whether a DG is located in the distribution network to avoid costs. The MEU comments only apply where all power from the DG is absorbed in the distribution network where it is located, all the time. If there is any power exported to the transmission network, then the DG should be required to pay for use of upstream distribution assets up to the connection point with the transmission network. This then puts an exporting DG on an equal footing with transmission connected generation.

		The initial Rules should not permit DNSPs to levy on DGs either positive DUOS charges for energy exported to the grid or deep connection costs. Voluntary payments from DGs to DNSPs should be permitted where a DG agrees to pay for upstream augmentations in order to increase energy transfer capability, in the same way that a transmission connected generator can pay for upstream augmentations of the transmission system.	Strongly agreed Strongly agreed
8. Pricing of negotiated DG connection charges	Pricing of negotiated connection charges may be affected by misuse of market power. *Moderate to high – will depend upon existence of countervailing power and level of regulatory scrutiny and enforcement of negotiating frameworks*	The initial Rules should retain a requirement for DNSPs to submit their proposed negotiating framework for DG connection charges to the regulator for approval and subsequent publication. The Rules should require the AER to be satisfied that this framework: ▪ provides for a robust procedure for the negotiation of connection agreements, including information exchange; ▪ requires DGs only to fund shallow connection costs, where shallow is defined as the nearest point of the existing shared distribution network; and ▪ provides for DG proponents to be made aware of the options for the funding of deep connection costs or the connection constraint consequences of these not being funded (either by the DG or customers), including measures to ensure the provision of sufficient information to apply the	See comments in section 7 above Agreed Agreed. There should be provision for arbitration by the AER in the event of a dispute.

		regulatory test so as to determine the extent of any appropriate user-funded network augmentation.	
9. Avoided TUOS payments	Payment of avoided TUOS charges to DGs creates a double incidence of costs to DNSPs with no corresponding benefit and may thereby motive DNSPs to impede DG uptake. *High – double costs incidence with no corresponding benefit will tend to motivate obstruction*	The Rules should remove the requirement for DNSPs to make avoided TUOS payments to DGs. The Rules should continue to provide for both TNSPs and DNSPs to make network support payments to DGs, EGs or DSR providers, where the planning and regulatory test obligations under the Rules establish that such non-network solutions represent the most efficient means of alleviating a network constraint.	See comments in section 7 above. It is agreed that the current arrangements as applied by DNSPs and based on TNSP pricing structures provide little benefit now to DG. It is necessary to find other more cost reflective means to overcome the active disadvantages currently faced by DG. Why? This is distortive and does not recognise the benefit DG makes to the transmission system by reducing demand at the DNSP/TNSP connection point. Agreed

Table 1.2
Summary of potential DSR and DG incentive barriers – non-revenue and non-pricing rules – MEU Response

Stage of regulatory process / rules	Potential Barrier *Materiality*	Recommendations	MEU Response
1. Negotiate Arbitrate Form of Regulation	There is a need for alignment of the price and non-price aspects of the dispute resolution framework.	Any changes to the principles for dispute resolution arising from the current review of Chapter 6 should ensure that consequent changes (or relevant transition measures) are made for the Chapter 5 dispute framework.	Agreed
2. Service reliability standards	Deterministic standards encourage DNSPs to rely on network solutions. *Moderate – reduced 'firmness' of non-network solutions creates disincentive for DNSPs to rely on such solutions*	It is important that jurisdictional standard setters be cognisant of the DSR and DG incentive implications of network planning or service reliability standards. Consideration should be given to the use of probabilistic planning standards and their relative costs and benefits as compared with deterministic standards.	Agreed Agreed
3. Metering	Current predominance of accumulation metering for small customers is an impediment to efficient, capacity-based pricing. *Moderate to high – metering technology limitations are a critical reason for current over-reliance on usage-based tariffs*	Potential benefits in terms of improved pricing and incentives for DG and DSR should be taken into account in evaluation of large scale AMI roll-out.	The MEU comments apply to residential PV arrangements See comments in 1.1 section 1 above Agreed

	Priority for roll-out of AMI for customers subject to large scale PV roll-out. *Moderate – metering technology is a potentially significant limitation on success of PV.*	DNSPs should be encouraged or required to ensure that customers subject to large scale PV roll-out receive priority in the roll-out of AMI, thereby facilitating the development of network tariff structures that provide efficient signals for the installation of PV.	Agreed
4. Losses	Averaged distribution loss factors unlikely to give sufficient credit for impact of DG on marginal losses. *Moderate – extent of effect not clear, but may be very significant in some cases.*	Further analysis be undertaken on whether the current treatment of losses is consistent with promoting efficient distributed generation projects.	Agreed
5. Constraints on energy export	Non-price connection terms and conditions in Chapter 5 have the potential to create impediments for DG.	That further work be undertaken to investigate whether the non-price connection terms and conditions provided in Chapter 5 of the Rules create any impediments to the efficient utilisation of distributed generation capacity.	Agreed
6. Access to load Control infrastructure	Full benefits of AMI direct load control may not be realised where DNSPs, retailers and DSR intermediaries do not have access to such facility. *Low to moderate – not clear that DNSPs would have incentive not to allow retailer access, however, where they do the costs in terms of foregone retailer benefits may be significant.*	Where a direct load control facility is available at a customer's connection point, consideration should be given to ways to ensure the controller of this infrastructure provides access (on reasonable or regulated terms) to that customer's retailer, DNSP, TNSP or other DSR intermediary engaged by the customer for the purposes of load control.	Agreed in principle. In practice retailers will change frequently and not have the facility to operate DG/DSR preventing them from being appropriate to have direct control of DG/DSR options. DG/DSR benefits for distribution benefits may not be coincident with market drivers to exercise DG/DSR. If the DG/DSR is driven by network benefits then the DNSP must have control.

7. Connection information	Provision of adequate and timely information on network constraints is important for DG locational decision-making. *Low to moderate – unclear how important this information is to DG location decisions.*	A review of the information requirements in chapter 5 of the Rules is necessary to ensure that: ▪ DNSPs provide DG proponents with the information necessary to apply the regulatory test to a DG connection proposal; ▪ DNSPs provide information on the emergence of network constraints as well as areas of substantial under-utilised existing transfer capability in order to allow prospective DGs to identify and site in the best location by reference to: – alleviating network constraints (and potentially earning network support payments); or – maximising energy transfer capability without incurring additional deep connection costs; ▪ DG proponents reveal their intended energy export levels such that DNSPs can accurately assess deep connection costs and formulate any connection constraint conditions that are required to protect network performance where: – the DG proposal does not satisfy the regulatory test; and – the DG proponent chooses not to fund the deep connection costs.	Agreed Agreed Agreed