

Delivering energy to South Australians

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ETSA Utilities ABN 13 332 330 749, a partnership of:

CKI Utilities Holdings Pty Ltd ABN 54 091 142 380

HEI Utilities Holdings Pty Ltd ABN 50 091 142 362

CKI/HEI Utilities Distribution Pty Ltd ABN 19 091 143 038

each incorporated in Australia

CKI Utilities Development Limited ABN 65 090 718 880

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Mr Mike Buckley
General Manager
Network Regulation North Branch
Australian Energy Regulator
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Dear Mr Buckley

Issues Paper - Potential development of demand management incentive schemes for Energex, Ergon Energy & ETSA Utilities for the 2010 - 2015 Regulatory control period

As AER has described in its Issues Paper, the demand profile in South Australia is very "peaky", resulting in very low asset utilisation for much of the year. Such a low asset utilisation requires a greater deployment of assets and therefore higher costs to customers than would be the case if asset utilisation were higher.

Demand management (DM) has the potential to improve this situation, thereby reducing costs to the distributor and customers. On this basis, ETSA Utilities is strongly supportive of an incentive scheme.

This paper addresses the issues raised by AER in its April 2008 Issues paper. If you have any further questions in relation to the matters, please contact Mark Vincent, Project Manager – Price Reset on (08) 8404 5284. We anticipate that a meeting may also be required with Lynley Jorgensen and her team to discuss the specifics of how these matters will be treated in South Australia.

Yours sincerely,

Eric Lindner

General Manager Regulation and Company Secretary

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 Incentives and disincentives for QLD and SA DNSPs to undertake demand management

Despite the benefits to customers, in the absence of any incentive scheme, distributors have little incentive to undertake demand management initiatives. This occurs for a number of reasons, including:

- 1. Demand management solutions remain largely unproven and therefore reflect a higher risk than network-based solutions;
- 2. The distributor does not have access to benefits accruing to other industry sectors such as transmission companies, generators and retailers;
- 3. There can be strong penalties under service incentive schemes, and a severe community backlash, if a DM solution fails to deliver the required demand reduction under peak demand conditions.

Although benefits can accrue to the distributor through deferral of capex, such benefits are limited to the return on and of the capex for the period it is deferred. The AER's proposed efficiency benefit sharing scheme, which does not currently foresee a capital efficiency carryover applying, means that the benefit of deferral near the end of the regulatory period is substantially reduced.

These issues are dealt with further in section 6 below.

In the absence of an incentive scheme, distributors have little incentive to apply demand management solutions.

2. Necessity to apply a DMIS in QLD and/or SA given impact on customer prices and willingness to pay for such incentives?

Ultimately, demand management initiatives should be "self-funding" in that prices to customers with DM solutions in place should be lower than those if typical network-based solutions were utilised. We note that the benefit to customers will also include an energy cost benefit. Accordingly the DMIS should allow the distributor to capture benefits in addition to those that arise purely from the deferral of the distributor's capex.

In the short-term, additional incentives to distributors are required in order to offset the disincentives discussed earlier in this response. Once demand management solutions become proven in practice, and the associated risks are assessed, the level of incentive and the sharing of benefits with customers may be reviewed.

The incentives contemplated by the AER, combined with the gradual implementation of demand management solutions, are unlikely to have a material impact on customer prices in the short term. Community reaction to ETSA Utilities' current DM initiatives would tend to indicate that customers are supportive of such small scale investment given the potential long term benefits.

A DMIS should ultimately reduce prices to customers. In the short-term, such incentives are unlikely to have any material impact on customer prices.

 Incentives or disincentives to applying DM under particular control mechanisms

ETSA Utilities appreciates that some revenue controls can have greater or lesser disincentives to apply demand management solutions. For example, under a revenue cap, there is no revenue disincentive to implement demand management solutions, whereas under a pure revenue yield, the distributor will lose revenue to the extent that a demand management solution reduces total electricity sales.

It is noted however that the variable is the "absence of disincentive" as distinct from any particular incentive.

As discussed earlier, the only incentive to a distributor to implement DM, in the absence of an incentive scheme, is the deferral of capex.

The implementation of a DMIS should consider the control mechanism in place and attempt to negate any intrinsic disincentive under that control to implement demand management solutions. The NSW d-factor illustrates one such mechanism by which this could occur.

A DMIS should remove disincentives for a distributor, under their particular control mechanism, to implement DM solutions.

 Ability of DNSP to offer efficient pricing structures & effect on the need for a DMIS

Efficient pricing structures, in relation to demand management, imply that prices reflect the underlying costs of augmenting the network to match increased peak demand. Such tariffs would be deemed "efficient" and are encouraged under control mechanisms where revenues have some relationship to volumes.

Efficient "demand tariffs" can be implemented for large customers that have interval meters installed, and ETSA Utilities has such tariffs in place. Such peak demand data is however not available for small customers. In the absence of interval meters for these customers, energy usage can be used as a proxy for peak demand, however this is a relatively "blunt instrument".

Without demand data, true cost reflective tariffs cannot be established for these small customers. The major impediment for efficient pricing for these customers is therefore the lack of interval meters rather than any factor in the regulatory regime.

ETSA Utilities does not consider that there is any material interplay between an ability to offer "efficient pricing structures" and the need for a DMIS. With efficient pricing in place, incremental demand should be priced reflective of incremental cost. Such incremental cost would be based on the lower of the cost of network-based or DM solutions, but does not offer any additional or lesser incentive to apply demand management solutions above those discussed in section 1 above.

Efficient pricing structures can be used as a demand management tool by appropriately encouraging customers to change their usage patterns and/or ensuring that they pay appropriately for their additional demand, but this does not, in itself, constitute a basis for not having a demand management incentive scheme.

DNSPs can offer efficient pricing structures to large customers, and to a lesser extent, small customers. An ability to offer efficient pricing structures can assist DM initiatives to be more effective, but does not negate the need for a DMIS as it does not alter the incentives or disincentives to apply DM solutions.

Lessons learned from QLD, SA and other jurisdictions and application to development of DMIS

ETSA Utilities is in no position to comment on the lessons learned in other jurisdictions.

With respect to South Australia, ETSA Utilities has had most success with programs targeted at large energy users such as power factor correction and load limitation. However these "easy wins" have been largely exhausted.

Programs targeted at large numbers of residential consumers that require behavioural change to be successful have, as-yet, not been in place for sufficient time to allow clear conclusions to be drawn. What is clear, is that such programs represent a much higher risk than programs associated with larger energy users.

The challenges and risks associated with implementing effective demand management solutions for residential customers remain high.

## 6. Interaction of DMIS with other incentive schemes

As discussed in section 1 above, the DMIS has significant interplays with other incentive schemes, as:

- Risks associated with non-compliance with high powered service incentive schemes can significantly outweigh potential benefits of demand management solutions;
- 2. Benefits from successful demand management accrue solely from deferred capex. An EBSS that excludes capex therefore dilutes benefits available from implementation of demand management solutions; and
- 3. Demand management solutions typically substitute opex for capex. In the absence of any exclusion, a DNSP would be penalised under the EBSS for additional opex required to implement a DM solution.

With respect to these issues (in the order above), ETSA Utilities considers that the scheme should:

- 1. Allow for exemptions to penalties under the service incentive scheme for DM solutions that result in unplanned customer outages<sup>1</sup>;
- Provide for a capital efficiency carryover, as a minimum on projects delayed as a result of successful demand management solutions; and
- 3. Exclude demand management opex from the operation of the efficiency carryover mechanism<sup>2</sup>.

In order to provide appropriate incentives for distributors to implement DM solutions, the AER should exclude DM related outages from the service incentive scheme, provide for capital efficiency carryovers, and exclude DM opex from the operation of the EBSS.

<sup>&</sup>lt;sup>1</sup> Noting that there remains considerable incentive for distributors to avoid such circumstances owing to the significant community reaction to any such events, should they occur.

<sup>&</sup>lt;sup>2</sup> We note that although the AER propose such an exclusion in section 4.4.2 of the EBSS Explanatory Statement, this does not appear to have been incorporated into the draft guideline.

 Optimal structure of potential DMIS & impact on efficiency of DNSP decisions

Given the current early stages of the development of the demand management, ETSA Utilities considers that an optimal structure of such a scheme should include the components of:

- 1. An "research and development fund", providing funding for untested and/or broad-based demand management initiatives; and
- 2. An incentive scheme, that would provide benefits to distributors for implementing initiatives to address specific network constraints.

It is considered that the research and development fund should be kept administratively simple by providing funding on a "use-it or lose-it" basis, subject to annual reporting only. The administrative burden of both ex-ante and ex-post reviews is not considered warranted, particularly given the high profile of such initiatives within the community and therefore the likely high levels of scrutiny they will receive.

With respect to incentives, the iPART d-factor scheme does provide some incentive to apply DM solutions, however it appears to be administratively complex and is subject to ex-post evaluation processes which could result in a stranding of costs, despite best endeavours on the part of the distributor.

Further, as noted earlier, without a capex efficiency carryover mechanism in place, the incentive to defer capex remains relatively weak. An efficiency carryover mechanism for DM related capital deferrals, as a minimum, is required.

In the short-term, an optimal DMIS should incorporate both "research and development" funding and a "d-factor" type scheme to encourage inperiod demand management solutions.

8. Likely costs & benefits of implementing the DMIS proposed in this paper or any other potential DMIS

As with the implementation of any new scheme, there will be significant start-up costs, the magnitude of which will depend on the complexity and the extent of reporting and approvals.

It is noted that schemes described in the DM paper appear highly administratively onerous, on both AER and distributors. It is considered that the schemes could be simplified to reduce cost.

In any event, the costs of implementing the demand management schemes proposed in AER's Issues paper are considered immaterial in relation to the potential benefits available if DM could be applied broadly and successfully across distribution networks.

The costs associated with implementing a DMIS are considered immaterial, particularly when compared to the significant benefits that may be achieved in the future. Every effort should be undertaken to simplify the schemes to reduce administrative costs to the AER and distributors.