



24 February 2017

Mr Warwick Anderson
General Manager, Network Regulation
Australian Energy Regulator
GPO Box 3131
CANBERRA ACT 2600

via electronic mail: DM@aer.gov.au

Dear Mr Anderson,

Re: Demand Management Incentive Scheme & Innovation Allowance Mechanism

The NSW Irrigators' Council (NSWIC) welcomes the opportunity to make a submission to the Australian Energy Regulator's (AER) Consultation Paper on the development of a new demand management incentive scheme (DMIS) and innovation allowance mechanism (IAM). NSWIC understands that the DMIS and the IAM are designed to complement the AER's ongoing reform efforts around consumer choice and efficient network pricing. In this respect, the Council appreciates the AER's effort to incentivise the Distribution Network Service Providers (DNSP) to conduct more efficient non-capital expenditure in order to minimise future cost pressures on consumers. Furthermore, the Council considers it imperative that increased demand management R&D is encouraged by the regulator in order to find more innovative solutions for the distribution of electricity across the NEM.

As the Australian Energy Market Commission (AEMC) concluded, demand management could save between \$4.3 billion and \$11.8 billion over the next ten years. In order to realise these savings, the AEMC suggested incentives for the DNSP and the transmission companies to encourage demand management solutions and avoid further capital investment, leading to lower costs for consumers.

Given NSWIC's ongoing concerns about unsustainable electricity prices in NSW that are impeding on-farm productivity, irrigator financial viability and export competitiveness, the Council feels the National Electricity Objective to 'promote efficient investment in, and efficient operation and use of electricity services for the long-term interest of consumers' of electricity with respect to price, quality, safety, reliability and security of supply of electricity is not realised. The current governance arrangements and existing regulatory inefficiencies (in particular around the regulated

asset base) not only drive the DNSP to further capital expenditure but also prevent efficient and equitable network prices for consumers.

Recent developments and innovation in the National Electricity Market have highlighted the need for regulatory reform in the demand management space. Not only are we seeing new partnerships emerge between government, community groups & network businesses but new technologies continuously appear in the market that have the potential to interrupt the current vertically integrated national electricity markets. In addition, (and more importantly), electricity consumers are starting to be actively engaged in the electricity debate and are increasingly 'voting with their feet' through the installation of solar PV systems and emerging battery technology. Consumers are increasingly expressing their wish to gain control over their electricity use and costs by taking actions and irrigators in NSW are no exception.

Irrigation and Electricity

Electricity has become a major input factor in irrigated agriculture due to increased competitive pressure for water resources and a highly variable climate which has led to significant structural adjustments in the irrigation sector over recent years. Many irrigators have converted existing on-farm irrigation equipment to reduce their water use through more efficient technology and while initial studies indicate that the water savings achieved through on-farm infrastructure investments have surpassed prior expectations, side effects have materialised in terms of higher energy usage.

These upgrades - which have been supported by the Federal Government via the Water Act 2007 (Cth) and the Murray-Darling Basin Plan 2012 – have not only led to greater electrification in irrigated agriculture but also coincided with a sharp increase in electricity costs. A small sample assessment of electricity bills from irrigators and growers in 2014 indicated that electricity prices in the NSW irrigation sector have increased by up to 300 per cent over the period (2009–2014), mainly due to rising network charges.

Internal investigation of irrigators' electricity bills indicate that network charges make up between 50 to 65 per cent of irrigators' electricity bills. The continuous increase in the cost of network services (partially a result of the Regulated Asset Base and Weighted Average Cost of Capital) and the underlying regulatory framework governing network tariffs (i.e. demand driven tariffs) are the main reasons irrigators are considering 'switching off' efficient irrigation technologies in an effort to reduce rising electricity costs or 'going off grid' as a means of having control over their future energy costs.

Irrigators & Demand Management Opportunities

As the National Electricity Market is evolving, it must be ensured:

- a) the integration of new technologies (including intermittent renewable energy) are coordinated and well managed to avoid inefficiencies and other unnecessary costs;
- b) the introduction of demand management solutions is holistically managed;

- c) the information asymmetries between DNSPs, consumers and third party demand management providers is addressed.

While NSWIC believes irrigators and regional communities can play an active role in demand management, embedded and distributed generation (thereby achieving greater operational efficiencies in the network), they are currently unable to fully participate or forward plan because of a lack of data and comprehensive information on network constraints and load profiles.

Despite this barrier, NSWIC believes that the dynamics of the current National Electricity Market provides a perfect opportunity to investigate potential mutually beneficial outcomes for networks, irrigators and third party demand management service providers. For that reason, NSWIC believes it is critical that the AER, in the next iteration of the demand management incentive scheme, considers the existence of potential wide scale opportunities between DNSP and rural electricity consumers for future demand management solutions. The AER must consider how the demand management incentive schemes could be an enabler for these demand management opportunities and 'reward' consumers who are actively willing and able to work with the DNSPs to bring about change (i.e. better manage peak demand loads to offset potential future network augmentation CAPEX).

Information Provision

NSWIC agrees with the AER that there are information gaps that prevent consumers and third party demand management providers from assessing the full sweep of opportunities around demand management. This information vacuum includes current network constraints and load profiles. We have attempted on many occasions to obtain access to this information in order to analyse irrigators' electricity use profile and work on sustainable, long term solutions that could assist irrigators to better manage their electricity costs.

NSWIC believes the AER needs to address this issue urgently and consider alternative arrangements for this information to be provided (i.e. potentially outside the demand management incentive scheme).

Incentives for Demand Management

NSWIC agrees with other stakeholders that certain aspects of the current regulatory framework prevent optimal and efficient investment decisions by the DNSPs. NSWIC is of the view that the DNSPs have a strong preference for capital expenditure over operating expenditure due to the direct relationship between the DNSP's regulated asset base, the weighted average cost of capital, and their revenue allowance.

The DNSP's regulated asset base (RAB) plays an important role in irrigators' current electricity bills and a continuous increase in the asset base – due to increased CAPEX - will lead to an even more unsustainable cost pressure for irrigators. NSWIC has advocated for quite some time for consideration of revaluing the DNSPs RAB to reduce the cost pressure on customers. While we understand there is some reticence to write off historical investment, we believe that without a detailed evaluation of the DNSPs regulated asset bases, networks will not be price competitive; an outcome

which we believe will result in significantly inferior results for the networks compared to a revaluation of the asset base or shifting to demand management solutions.

During previous discussions we had with the AEMC about the impact of the RAB on costs for consumers it was stated that the regulatory investment test (RIT-T) was to act as the stop guard to prevent over-investment in the network and avoid any ongoing inflation in costs, however we simply do not see this is working in practice.

Retained Benefits

NSWIC is concerned that the AER's consultation paper suggests further 'incentives' for the DNSPs to shift from CAPEX to demand management solutions through additional payments or earlier retention of benefits. While the Council understands the rationale behind this proposal, we are concerned that the NSW DNSPs have already derived significant profits under the current arrangements. Further incentives would exacerbate these profit drivers for the DNSPs under the demand management incentive scheme.

Instead of providing incentives for demand management solutions, NSWIC believes the AER should address the current 'incentives' for CAPEX (i.e the WACC and RAB relationship). While NSWIC understands that the AER has no mandate to revalue the DNSPs RAB, we suggest that there may be option to lower the WACC to more realistic values for the DNSPs as monopoly operators, as a first step.

Should you have any further questions or would like to seek further clarification on any of the issues raised in our joint submission, please contact Stefanie Schulte (NSWIC) stefanie@nswic.org.au or Felicity Muller (Cotton Australia) felicitym@cotton.org.au.