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19 May 2006

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Nemmco Proposed Rule Change For Harmonisation Of Metrology

EnergyAustralia welcomes the opportunity to comment on NEMMCO's proposed National Electricity Rule change to harmonise metrology procedures across the National Electricity Market (NEM) and to replace expiring derogations.

EnergyAustralia submits the following response to the four groups of Rule changes:

- 1. A1 Rule changes to provide for a single NEM metrology procedure is supported in full. As the NEMMCO proposal notes, a harmonised metrology procedure will reduce compliance costs and reduce risks to retailers and services providers that wish to operate across jurisdictional boundaries.
- 2. A2 Rule changes for the LNSP to be the party responsible for metering installations of Type5, Type6 and Type 7, and that the responsible party for Type 5 with "remote reading" should be determined in the same manner as for a Type 4 is not supported. This draft Rule will mean that the LNSP only has the right to be responsible for their own assets until they are remotely read. The asset and service could therefore become contestable at any time after installation. NEMMCO has proposed the Rule to accommodate the ACCC view that meters that are converted to remote reading status are to be contestable. The complex issue of the benefits and costs of remote meter reading for the mass market are not debated in the proposed Rule. The design principle submitted by NEMMCO is that retailers ought to be given the opportunity to take responsibility for the installation of meters with remote communication, where the retailer believes this is economically justified, and provision of this infrastructure by LNSPs ought to be subject to competition to create an efficiency driver on the LNSP.



EnergyAustralia strongly disagrees with this view and submits that:

- NEMMCO's proposal is premature and inappropriate at a policy level given COAG's
 February 2006 decision to rollout electricity smart meters from 2007 to allow the
 introduction of time of day pricing and effective demand-side response mechanisms in the
 electricity market. As a result, the policy around metrology is in flux and there is a
 foreseeable possibility the proposed Rule will need to be reversed to give affect to the
 COAG policy intentions.
- The Rule is not consistent with the national electricity market objectives for promotion of efficient use of electricity services, promotion of efficient investment or the long term interests of customers. I refer to the findings of the Joint Jurisdictional Review, which concluded that metering services competition for 'small' customers had minimal benefits, and the risks of introducing metering competition in this way would result in less competition in the primary electricity market.
- Australian regulators currently accept the conclusion that the benefits of exclusive LNSP meter service provision for the mass market exceed the costs. This is on the basis that metering services are of low value relative to other elements in the electricity supply chain, significant economies of scale exist, and there are operational and capital stranding risks around contestability of metering provision for the mass market. When the ACCC excluded remotely read Type 5 meters from its jurisdictional metering Derogations in 2005 there was no clear cost-benefit analysis presented in support of this ruling. However NEMMCO have reflected the ACCC view in full in the proposed Rule change.
- The rationale for mandating exclusive provision of basic meters applies whether the meter is read in-situ or read using other technologies. In fact, technology developments are likely to blur the distinction, for example if meter reads are collected in home computers and sent to utilities, does this constitute remote reading? It is clearly a nonsense to change the responsible person for an existing meter asset on the basis of the reading technology.
- The proposed Rule is a strong enough disincentive to stop LNSP's investment in interval meters, despite their clear role in a more capital efficient electricity market. EnergyAustralia Network has invested in more interval meters than all other market participants in Australia combined. This investment is justified by the available network capital savings from demand-driven changes to EnergyAustralia's peak demand and load profile. EnergyAustralia would accept any opportunity to demonstrate this benefit to the ACCC, NEMMCO or the AEMC. The proposed Rule introduces capital stranding risks that are unacceptable and will sterilise the benefits to the market of investment in any interval meters.
- 3. A3 Rule changes that an installed interval meter might not be replaced by an accumulation meter, that data is available to market participants and to encourage meter technology advances are supported. EnergyAustralia notes that the arguments for these Rule changes and the benefits to the national electricity market objective are entirely sound, and the contradictions with the arguments for competition in Rule changes A2 are apparent.

4. A4 Editorial changes are supported in full.

Recommendation

EnergyAustralia submits that the AEMC reject the aspect of the A2 group of Rule changes that cause a Type 5 meter to be re-defined based on remote reading.

An alternative is that the AEMC defer a decision on the NEMMCO proposal to re-define Type 5 meters until there is more certainty around MCE policy regarding the implementation of AMI for the mass market. Areas yet to be addressed by Australian policy makers and regulators at a national level include whether the benefits of mandating exclusive provision by the LNSP of AMI based metering services, for the mass market, exceed the costs. Evidence provided by several market participants (including EnergyAustralia) indicate that innovation and economic efficiency in delivering AMI to the mass market would be maximised by assigning exclusive responsibility to LNSPs. A cost benefit study prepared for the Government of Victoria in December 2005 conclude that the benefits of AMI based metering services for the mass market exceed the costs.

EnergyAustralia suggests it is likely that policy makers and regulators will, against the background of the COAG policy objective, conclude the rationale for mandating exclusive provision of basic meters also applies to remotely read Type 5 meters. If required, I suggest it would be preferable to extend the expiring derogations on a short-term basis, instead of imposing a Rule that could be reversed within a year of its adoption.

There would appear to be no reason why Rule changes in groups A1, A3 and A4 of NEMMCO's Rule change proposal could not be adopted in the meantime.

Further background information relevant to the above points is available in the attached appendix.

Please do not hesitate to contact me or Mr Harry Colebourn on (02) 9269 4171 to discuss any of these matters.

Yours sincerely.

GEORĞE MALTABAROW Managing Director

Appendix:

Background information relevant to proposed NEMMCO Rule change proposal regarding the definition of Type 5 meter services

In its February 2006 decision, COAG acknowledged that electricity reform had tended to focus on improving the efficiency of the supply side. COAG signalled it was now appropriate to focus on increasing demand side efficiency by improving price signals for energy consumers. Key actions include the progressive national roll out of "smart" electricity meters from 2007 – where economic – to allow the introduction of time of day pricing and to allow users to manage their demand for peak power.

EnergyAustralia welcomed this decision from COAG due to the potential benefits of advanced metering and time of use pricing in terms of economic efficiency promoted by improved use of, and investment in, the electricity system and the long term interests of electricity consumers. EnergyAustralia has been an industry leader in its introduction of time of use (ToU) network pricing for all customers down to 15MWh pa usage, and for all new and upgraded installations. EnergyAustralia is currently conducting Australia's largest dynamic peak pricing trial with 1,300 customers (including a blind control group) and is also in the process of conducting a pilot study for the introduction of Advanced Metering Infrastructure (AMI) that will enable remote reading of mass market interval meters.

The COAG decision did not define "smart" metering. EnergyAustralia submits smart metering includes the capacity for remote meter reading in order to support dynamic network management and other metrology based enhancements (i.e. AMI).

This is consistent with the experience and practice both in Victoria and overseas. Regarding the former, a cost-benefit study by Charles River Associates in 2005 justified the incremental expenditure of remote communications for Victoria's ToU meter rollout programme. EnergyAustralia notes the Victorian Government decided that LNSPs were best placed to rollout Type 5 meters with communications, not retailers.

In July 2004, EnergyAustralia commenced the rollout of Type 5 interval meters to facilitate ToU pricing. To ensure that EnergyAustralia's investment in these meters will not be subject to technological redundancy, the meters installed have the capacity for remote reading in the future. Under the programme, all new upgraded and replacement meters purchased must be Type 5. As a result, EnergyAustralia is now at the forefront of ToU capable metering for the mass market with 100,000 of the 150,000 Type 5 meter in the NEM, and is well positioned to implement and utilise technological developments in the future.

Building on the Type 5 interval meter rollout, EnergyAustralia also mandated Type 5 meters with ToU tariffs as the default arrangement for all new customers and upgraded connections from 1 January 2005. The roll out of ToU price structures down to 15MWh is underway and with the Type 5 roll out and slated for completion in late 2009, with the majority of higher-use mass market consumers expected to be better off under ToU pricing relative to the current inclining block tariff.

Further, EnergyAustralia is undertaking a pilot study to test the feasibility of the full rollout of AMI. This pilot will examine and quantify the operational and implementation issues associated with a widespread deployment of the new technology. EnergyAustralia is also conducting Australia's largest study on dynamic tariffs, the Strategic Pricing Study (SPS), which tests customer's demand response and the potential for innovative new ToU-based tariffs to shift demand and flatten the load duration curve. Advanced metering technology will be an important platform to support innovative new cost reflective pricing structures such as Dynamic Peak Pricing, where intra-day signals and the provision of real-time consumption information through in-house display units can augment the peak load shifting arising from a "plain vanilla" ToU tariff. From this SPS study and the AMI pilot, EnergyAustralia will have robust data on anticipated CAPEX deferral and OPEX savings to feed in to the business case for a pervasive rollout of AMI technology with voluntary dynamic tariffs in our supply area.

As you will be aware, even a modest improvement in the shape of the load duration curve (or an arrest in its deterioration) has important benefits in terms of increased capital efficiency and reduced capital expenditure right across the electricity supply chain. Further, this has obvious advantages in terms of the National Framework for Energy Efficiency and the new National Climate Change Plan for Action, both of which were also announced by COAG in February 2006.

The initial results from the SPS pilot study, in addition to ToU sample data, suggest that ToU-based pricing does have an observable positive effect on consumption patterns, even in the short run. Further, qualitative data from focus group research suggests customers are generally comfortable with the principle of ToU and do in fact shift appliance use to non-peak periods. Quantitative data from 244 residential customers on ToU tariffs has shown that customers shift their washings machines, pool pumps, and even modify their use of air conditioning.

If the AMI pilot study is deemed successful, EnergyAustralia will consider the commercial merits of a full rollout of advanced metering infrastructure to all SME and residential customers. The indicative capital investment required is in the order of \$300m and thus would proceed only if there were adequate offsetting incremental savings and revenues, together with manageable uncertainties and risks. The regulatory environment, including the boundary for exclusive meter service provision, and cost recovery, will clearly be an important consideration, influencing whether the proposed AMI capital expenditure is able to proceed.

EnergyAustralia's initial analysis suggests the incremental benefits from adding remote meter reading capabilities to Type 5 meters for the mass market, in terms of lower operating costs, and dynamic network management, exceed the incremental costs from a full supply chain perspective (even while installation costs are falling). This assumes AMI is ubiquitous across our network and there is a minimal or non-existent risk of asset stranding.

We are also aware AMI would provide additional and significant non-network related benefits to consumers and retailers. These could include lower long-term energy prices and a lower required retail margin to cover energy price volatility and trading risks. AMI also offers the potential for reducing the cost of retail market settlement and increasing billing frequency. The latter could result in a significantly lower working capital requirement and reduced bad debtor problems for retailers, alongside more manageable bill payments for consumers.

In addition to the broader advantages of AMI, a specific advantage relates to chronic access sites. Chronic access refers to sites where a manual meter reader cannot gain access during scheduled meter reading, for example due to security measures at customer premises. Chronic access is increasing the cost of manual meter reading though a combination of a requirement for additional or *ad hoc* meter reading visits and in some cases the loss of consumption data due to the data storage limitations of interval meters. The increasing cost of retrieving consumption data at chronic sites affects approximately 15,000 sites in EnergyAustralia's licence area and is having a significant adverse financial impact. To address this problem, in its proposed plans for full scale roll out AMI, as described earlier, EnergyAustralia would give priority to sites with chronic access.

The NEMMCO metrology Rule change proposal is for Type 5 meters to be redefined to refer only to manually read meters and that all existing and new Type 5 remotely read meters would become Type Four. The effect of this change is that remotely read Type 5 meters are no longer mandated the exclusive responsibility of the LNSP. Instead, for each network delivery point, the consumer's retailer would be able to choose the Responsible Person (that is, whether this is the retailer or the LNSP).

Investment in AMI for the mass market under these circumstances would certainly be riskier and may no longer be viable. If this were the case, the significant network and non-network benefits identified would not be realised. This would be contrary to direction of the February COAG policy statement in support of smart metering and the NEM market objectives.