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Via online submission

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Australian Energy Market Commission
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ERC0201: Five Minute Settlement

Jemena Limited (**Jemena**) welcomes the opportunity to comment on the Australian Energy Market Commission's (**AEMC**) consultation paper on the 'Five minutes Settlement' directions paper.

Jemena owns and operates the Jemena Electricity Network (**JEN**) in Victoria that delivers electricity to over 335,000 homes and businesses and provides metering services to most of these customers. Given the strong linkages in the directions paper to metering services, Jemena has a strong interest in this consultation as it would directly impact both us and our customers.

We support the intent of the AEMC's consideration of moving towards shorter settlement periods

Jemena understands that there are some potentially significant benefits in changing the market settlement from 30-minute to 5-minute intervals, particularly in the context of a dynamic and innovative energy market that is evolving rapidly. The primary benefit from changing the settlement period will be harnessing the opportunities that open up to more responsive generation technologies. Jemena considers these opportunities are consistent with the long term interests of customers as set out in the National Electricity Objectives by giving greater choice, security and pricing options when meeting customers' energy needs.

Options for acquiring 5-minute settlement data

Jemena envisages that there are two key options for obtaining 5-minute data for settling the market each of which has a cost/accuracy trade-off, we discuss these in further detail below.

Profiling meter reads using SCADA data

It is possible to use Supervisory Control and Data Acquisition (SCADA) data—which is captured in five minute intervals—to profile 30-minute interval data into 5-minute settlement data. Jemena recognises that using SCADA data to profile interval meter data reduces the accuracy of the 5-minute interval usage data at a connection point. However we also note that meter level data may not always be possible (due to customer refusals, proportion interval meters rolled out) and therefore some level of

profiling will be necessary to achieving the objective outlined in the objectives paper, at least in the short to medium term.

On this basis we consider that profiling has a role in any option considered by the AEMC in this consultation.

Capturing meter reads in five minute interval

During the period 2009-15, JEN rolled out Advanced Metering Infrastructure (**AMI**) under a Victorian Order In Council (**OIC**). The meters deployed were acquired in accordance with the Victorian minimum service specification. Additionally, the services provided through AMI are done so in accordance with Victorian Government mandated minimum service specification.

The capabilities acquired and the services provided include the collection of interval meter reads in 30-minute intervals. At the time of establishing these standards and deploying AMI it was not envisaged that meter reading interval could decrease to 5 minutes.

Despite the potential for a change in requirements, JEN has some capability to meet this challenge. JEN notes that its single phase AMI meters could be reconfigured to capture 5-minute data recording and will in the majority of instances have sufficient memory to meet the NER 35 days storage requirement for the fleet of single phase meters. In contrast, JEN's three phase meter fleet will not be able to provide five minute interval data to meet any new obligations; these meters must be replaced to be compliant with any new obligations.

If this option is to be pursued then a detailed review of metering obligations will be necessary to ensure the metering requirements align to the reduced time-frame settlement objectives under this discussion paper.

Significant IT upgrade

With a sixfold increase in metering data that is to be collected, communicated, and stored there would necessarily be a significant upgrade to back end systems and processes of market participants and AEMO. The impacts on system design would be significant across the industry and further industry wide consultation is encouraged.

The AEMC's preferred approach

The AEMC appears to prefer metering for five-minute data collection and analytics, rather than a SCADA system approach of profiling. It also considers there is merit in aligning any requisite installation/retrofit or upgrading of revenue meters to align with existing testing and compliance requirements of the types of meters.

The AEMC's preferred approach is to transition from the current thirty-minute settlement to a five-minute settlement architecture indicatively in three years. This time-frame is intended to allow the electricity sector, its participants and regulatory entities to adapt to the changes, presumably in an efficient way.

At this stage, it is not apparent that the AEMC has fully taken into account the likely costs and magnitude of such a significant move on network businesses, including the timing implications and overlapping regulatory changes, including the deferral of metering completion in Victoria. Jemena urges the AEMC to undertake a more

robust assessment of these costs to ensure the benefits of each approach are commensurate to the benefits that accrue from the reform.

We have provided initial impacts and our cost estimate

We are not able to produce a robust cost estimate for capturing meter reads in give minute intervals given the lack of requirements and short time frames, however, at a high level we consider the costs to be in the range of \$20M to \$30M, this does not include physical changes to JEN's three phase meters that will be required, nor any changes required to operate in the NEM.

Jemena considers this cost to be substantial and that given the impacts to customers, it should be weighed against the benefits in an industry wide economic modelling exercise.

If you wish to discuss the submission, please contact Matthew Serpell on (03) 9173 7000 or at matthew.serpell@jemena.com.au.

Yours sincerely

[signed]

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