Manager, MCE Secretariat,
Department of Resources, Energy and Tourism.
GPO Box 9839
Canberra ACT 2601

Submission by email: MCEMarketReform@industry.gov.au

ActewAGL Distribution Response – MCE 's Smart Metering Phase 2 Report – Cost Benefit Analysis of Smart Metering and Direct Load control

Dear Sir/Madam

ActewAGL Distribution welcomes the opportunity to comment on the findings of MCE's Smart Metering, Phase 2 Report – Cost Benefit Analysis of Smart Metering and Direct Load control.

In order to determine the impact on the consumers and ActewAGL Distribution in the ACT, ActewAGL welcomed this investigation into the technical and economic aspects of smart metering.

Unfortunately the reports have failed to clearly and accurately portray the way that ActewAGL Distribution is operating in the ACT. There is a fundamental problem with the consultants' analysis pertaining to ActewAGL Distribution where the analysis is based on ActewAGL only installing electromechanical Type 6 meters when the reality is that ActewAGL only installs Type 5 interval meters. In addition, the ACT analysis is often grouped together with NSW. ACT and NSW regulatory arrangements, consumption trends and usage patterns in relation to metering are separate and substantially different, and this affects the case for the roll-out of smart meters in the ACT.

The attached document discusses the relevant points in more detail. However, in general, ActewAGL considers that the Phase 2 report contains many factual errors. ActewAGL does not support grouping of the ACT with NSW in various tables listed throughout the Phase 2 documents.

Presently the meters that ActewAGL install are Type 5 interval programmed for being manually read as Time Of Use (TOU). These meters can support two way communications, and are capable of being connected to an In-House Display (IHD).

These features enable retailers to offer tariffs and services that can assist the consumer to better manage their electricity needs and reduce their bill.

If a national approach for the roll-out of smart meters is mandated, a cautious approach must be taken to test technologies so that quoted service levels can be proved, and costs and benefits verified. Parallel with these trials, appropriate rules and regulations must be developed before a full deployment for smart meters can be considered.

If you have any questions in relation to this response, please call Mr. Paul Sanguineti on 02 6293 5870 or 0414 515 686.

Yours faithfully,

Paul Sanguineti
Metering Manager
ActewAGL Distribution

Response to the MCE Smart Metering Phase 2 - Cost Benefit Analysis of Smart Metering and Direct Load control

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ActewAGL Distribution ABN 76 670 568 688
A partnership of ACTEW Distribution Ltd ABN 83 073 025 224 and
Alinta GCA Pty Ltd ABN 24 008 552 663
Head Office: ActewAGL House, 221 London Circuit, CANBERRA ACT 2600
GPO Box 366, CANBERRA ACT 2601
http://www.actewagl.com.au

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1. Introduction

ActewAGL is a joint venture between ACTEW Corporation Limited, a territory-owned corporation of the ACT Government, Alinta GCA Pty Ltd, and the Australian Gas Light Company Limited (AGL), Australia's largest energy supplier. The joint venture comprises two partnerships: ActewAGL Distribution and ActewAGL Retail.

ActewAGL Distribution provides this submission in response to the MCE s' Phase 2 Report – Cost Benefit Analysis of Smart Metering and Direct Load control.

ActewAGL Distribution participated in all surveys and returned all RFI surveys that were requested of it for the Phase 2 component of this report, and attended the workshop in Sydney on 5 December 2007 to be briefed and provide feedback on the preliminary findings of the consultants involved with preparation of this Phase 2 report.

2. General comments on approach and findings

2.1 Incorrect base case assumptions

In this report and many of the other reports, the consultants have made a critical mistake in the costing for the installation of smart meters for the ACT. It is documented on pg 81 of the Overview report that:

> "In the Australian Capital Territory, the current replacement policy is for the installation of an electromechanical accumulation meter for all new and replacement meters. As a result, there is no alternate metering base case".

This is incorrect, and contradicts the information contained in the RFI that was submitted to the consultants. Despite repeated efforts to have this error corrected after it was identified at the MCE workshop held in Sydney on 5 December 2007, and assurances that it would be rectified, this error remains in the draft phase 2 report.

From March 2007, ActewAGL has installed interval meters programmed to be read as Time Of Use (TOU) meters for all new installations, at the request of the customer and as part of its meter replacement program.

Interestingly, the only report that does get this information correct is the Retailer Impacts report –Workstream3 (pg 67). This disparity in the characterisation of the base case between the reports suggests that the reports have used potentially vastly different assumptions in their calculations. Therefore, there appears to be considerable potential for further undiscovered errors and inconsistencies between the models used for the reports.

The error in the base case significantly taints the findings for the ACT, as it assumes that the counterfactual case has no scope for time of use or interval pricing. This means that the outcomes for the ACT are likely to be in reality, less favourable towards smart meters than the report itself concludes. Subsequent correspondence with NERA and the MCE has confirmed that the report's published costs are wrong for the ACT.

Despite these shortcomings, ActewAGL agrees with the consultant's summary on pg 83 of the NERA Final Overview report that a Smart Meter rollout is not justified in the ACT on the basis of business efficiency alone.

2.2 Limited direct consideration of ACT issues and conditions in the analysis and reports

In many cases throughout the reports, the analysis, results and conclusions for the ACT have been bundled together with NSW, or left out of considerations entirely.

The ACT is subject to different regulatory arrangements, as well as vastly different geographic and demand characteristics than those experienced in NSW. Also, as a small jurisdiction, a smart meter rollout is likely to have a considerable impact on prices in the ACT.

As consideration of ACT-6specific conditions appears have been limited, some doubt must be cast on the report outcomes for the ACT, with the potential for bias towards NSW outcomes, which reflect a peakier load with higher concentration of reverse cycle air conditioners impacting summer demand.

3. Detailed comments on the reports

3.1 NERA Document - Cost benefit Analysis of Smart Metering and Direct Load Control – Workstream 1: Final Overview Report

- The report failed to acknowledge ActewAGL Distribution response to the Phase 1 Overview report.
- The report on pg 213 failed to give a breakdown or mention the number of NMI's for the ACT, despite this information being readily available.

3.2 CRA Document - Cost benefit Analysis of Smart Metering and Direct Load Control – Workstream 2: Network Benefits and Recurrent Costs

- Section 6.2 - ActewAGL has different requirements for metering of PV installations, and purchases 100% of the energy from the customer and requires that the PV energy is individually metered; therefore there are no avoided costs in having import/export metering.
- Section 7 - ActewAGL is a multi-utility, providing electricity, water and gas services. As such, our meter reading costs are low as all three services are read at the one visit.
- Appendix F Counterfactuals, F2.1 pg 110 - The consultant carried out the study using incorrect information and believed that the ACT was installing electromechanical meters.

3.3 KPMG document – Cost benefit Analysis of Smart Metering and Direct Load Control – Workstream 3: Retailer Impacts

- Although ActewAGL Distribution did not comment on behalf of ActewAGL Retail, it was noted on pg 66, Table 3 that ACT does not have FRC. The ACT has had FRC since 1 July 2003.
- In the case of all the tables, the ACT was grouped with NSW. The problem that arises is that ActewAGL Distribution offer different times for Peak Shoulder and Off-peak for both domestic and commercial periods.

3.4 NERA Document - Cost benefit Analysis of Smart Metering and Direct Load Control – Workstream 4: Consumer Impacts

- Tables throughout this document group the ACT in with NSW. ACT operates a different network and in accordance with the operational requirements suited to the ACT network and consumption trends. Thus the ACT must not be analysed in the same way as NSW. The ACT has a peaking winter load and does not experience summer critical peaking.
- Page 28 & 29, tables 3.3 & 3.5 have grouped the ACT in with NSW and reflected NSW TOU times, ActewAGL has different TOU time periods than NSW. Below are the ACT's TOU periods and are as follows:

  Domestic times are as follows:

Peak	7am – 9am, 5pm – 8pm (7 days a week)
Shoulder	9am – 5pm, 8pm – 10pm (7 days a week)
Off Peak	10pm – 7am (7 days a week)

  Business times are as follows:

Peak	7am –5pm (on working weekdays)
Shoulder	5pm– 10pm (on working weekdays)
Off Peak	is defined as all other times

- Section 5 - the ACT does not experience summer critical peaks similar to those in NSW.
- There is an error with the data written up in table 8.24 "Summary of jurisdictional bill impacts" on pg 99. Figures quoted in tables 8.7 and 8.8 on pg 82 relating to the ACT do match the figures published/reported on pg 99, table 8.24 for the ACT, both in the "total bill change" and "CPP + TOU" columns/line.

- There could be no avoided costs in the ACT using Import/Export metering for solar generation as ActewAGL Service and Installation Rules require that the solar generation be separately metered. This is done using a twin element meter in most cases.
- Appendix B - The ACT was largely ignored in this section, no details were published regarding air-conditioning penetration and when any mention of the ACT was made it was included with NSW data. As stated throughout this document the ACT operates differently to NSW both in TOU times and peaking times.
- Appendix C - The ACT was not included in this section and no reference made to air-conditioner stocks i.e. Table C.1.

3.5 CRA Document - Cost benefit Analysis of Smart Metering and Direct Load Control – Workstream 5: Economic impacts on wholesale electricity market and greenhouse gas outcomes

- It is difficult to comment on this section as the ACT was grouped in with NSW, but overall it appears that positive outcomes can be achieved in the reduction of CO_2 emissions and peak load demand on networks with either the introduction of smart meters or through the use of Direct Load Control (DLC).

3.6 EMC[a] Document - Cost benefit Analysis of Smart Metering and Direct Load Control – Workstream 6: Transitional Implementation costs

- It is difficult to comment on this section as incorrect assumptions used in the remainder of the document significantly influence the transitional costs. Putting aside this issue, it appears that the remainder of the document covers off costs for the various functionalities of a smart meter as outlined from the phase 1 study.
- ActewAGL is currently considering the use of Wi-Fi as a communication platform to communicate with meters (water, gas and electricity). We note that this technology was not investigated by the consultants.
- Until trials are carried out with technologies that are available, and actual real data is obtained, the cost assumptions and benefits contained in this report could only be considered indicative at best.

4. Conclusion

ActewAGL Distribution cannot support the analysis in the MCE Smart Metering Cost Benefit Analysis Phase 2 – Cost Benefit Analysis of Smart Meters and Direct Load control.

ActewAGL is concerned that the report contains a number of errors, tables that contradict summary tables, and grouping of the ACT with NSW for various scenarios which does not clearly identify the ACT network and its operational performance.

The resulting errors have a flow on effect with the incorrect counterfactuals thus tainting the overall documented findings for the ACT.

As this Phase 2 report indicated, there is no justification for the ACT to roll-out smart meters based on the assumptions in the analysis.

Presently ActewAGL is installing in all new installations, at the request of the customer and as part of our ongoing meter replacement program, Type 5 interval meters that are programmed to be read as TOU. This functionality partially aligns to aspects of the smart meter discussion where the customer is a given a choice/option to make financial savings if they choose to operate appliances at times where the cost of energy is at a lower rate.

If the ACT was mandated to roll-out smart meters then it should be a distributor-led roll-out. This conclusion was supported by the findings contained in the Phase 2 reports.

Cost recovery for a mandated roll out of smart meters should not only be for capital and operating expenditure but also extend to costs covering pilot programmes essential for the management of risk.

If a national approach for the roll-out of smart meters is mandated, a cautious approach must be taken to test technologies so that quoted service levels can be proved, and cost and benefits verified. Parallel with these trials, appropriate rules and regulations must be developed before a full deployment for smart meters can be considered.