



6 March 2015

QLDelectricity2015@aer.gov.au

Dear Sir

Re: MS Queensland response to Energex's Regulatory Proposal Overview 2015-2020 to the Australian Energy Regulator (AER)

MS Queensland welcomes the opportunity to respond to Energex's Regulatory Proposal Overview to the Australian Energy Regulator (AER)

MS Queensland's vision is a world free from multiple sclerosis (MS) and its devastating impact. We exist to help people living with MS to get the best out of life; to advocate for change and search for a cure. Our mission is to be the first-choice for MS information, education, treatment, care and support for equitable service delivery across Queensland.

MS is typically a progressive, unpredictable and incurable neurological disease that is diagnosed when young, between the ages of 20 and 40. Although we do not yet fully understand why some people are susceptible and others are not, we do know that more than 23,000 Australians have MS – almost 4,000 in Queensland.

Energy use and the corresponding cost are a significant issue for people with multiple sclerosis (MS) and, as such, acknowledgement and understanding across Industry together with cost effective Social and Policy solutions and community services obligations must continue to be adopted through 2015-2020.

Such measures will ensure individuals in Queensland who have a medical condition that present a non-discretionary need to keep cool and must achieve this through air conditioning use and adopting energy efficient initiatives, are met with equitable and efficient outcomes to maximise the efficiency of cooling for these households to minimise economic costs and have the ability to be active participants in adopting energy efficient technology.

Please find further feedback in response to Energex's proposal to the Australian Energy Regulator (AER) and the corresponding experience of MS Queensland in providing support to people living with MS and medical conditions* affected by the heat who have a non-discretionary need to use energy.

If you have any queries or require any further information, please do not hesitate to contact me on 07 3840 0801.

Yours sincerely

Lincoln Hopper
CEO
MS Queensland

*other cooling/heat intolerant medical conditions include:

Cerebral Palsy

Chronic Fatigue

Fibromyalgia

Lymph oedema

Motor Neurone Disease

Muscular Dystrophy

Parkinson's Disease

Poliomyelitis and Post Polio Syndrome

Quadriplegia

Scleroderma

Systemic Lupus Erythematosus

About multiple sclerosis and MS Queensland

MS Queensland is a leading non-profit organisation founded in 1958.

Our mission is to be the first-choice for multiple sclerosis (MS) information, education, treatment and provide equitable care and support across Queensland.

We exist to help people living with MS to get the best out of life; to advocate for change and to search for a cure.

MS varies significantly from person to person. Symptoms may include heat sensitivity, severe pain, walking difficulties, debilitating fatigue, partial blindness or thinking and memory problems. No two people will share the same disease path. For some people, it is a disease that comes and goes in severity with periods of unpredictable relapse and remission. For others it is a progressive decline over time. No two cases of the condition are the same and there is no known cure for MS. For all, it is life changing.

Representing energy issues for people living with MS and other heat affected conditions, common needs exist amongst this vulnerable population and consequently there is a need to ensure that recommended policy issues are highlighted to support the needs of people living with MS to remain connected to their community; socially and economically active members of their community.

Response to Energex's Regulatory Proposal Overview 2015-2020 to the Australian Energy Regulator (AER)

Due to a much higher than average energy use, and corresponding costs that are incurred in most homes for people living with MS, MS Queensland supports Energex's funding proposal as stated in Energex's Regulatory Proposal Overview 2015-2020 to the Australian Energy Regulator to be used particularly for:

- a) Demand management options and energy efficiency schemes including specific programs and initiatives targeted at households with high energy needs who require cooling/heating as a consequence of medical need
- b) Continue advocating appropriate tariff reform to replace direct incentive payments and give customers choice
- c) Education and engaging with customers to bring improved access to energy efficiency advice and greater tariff understanding

MS, Heat Intolerance and Energy needs

MS Queensland understands that meeting Queensland's future energy needs requires significant levels of investment now and over the coming decades. We appreciate the opportunity to respond to Energex's Regulatory Proposal Overview 2015-2020 to the Australian Energy Regulator (AER). We understand that investment will need to be met in a timely and cost effective way. Addressing the causes of price rises and customer expectations presents complex policy challenges for the Government, industry and consumers.

MS Queensland is encouraged by Energex's expected pricing outcome and the proposed suggested outcomes for funding use meaning residential customers will experience real price reductions in the network component of their electricity bill to June 2020.

Heat intolerance is a major medical problem affecting people with multiple sclerosis. As little as 0.2–0.5°C increase in core body temperature significantly increases MS symptoms, and significantly reduces the capacity of people with MS to participate in employment, social, household and work activities, as well as increasing their need for pharmaceuticals and medical services. Consequently the use of air conditioners, with all associated purchase and operating costs, is usually a necessity for people with MS.

Recent Australian research found non-solar homes, summer electricity use showed that those using more than the state or post code average, which was 60% of the case studies, used about 80% more electricity while the rest used about 18% less. The latter were predominantly found to have introduced energy savings initiatives and were careful about energy use¹ that about 90% of people with MS were adversely affected by heat (Summers, Simmons & Verikos 2012).

People with MS face significant disease-related expenses that must generally be met from lower than average incomes as a consequence of their MS (Covance & Menzies Research Institute Tasmania 2011). Additionally, the rapidly rising costs of electricity they require to keep cool, along with the growing number of hot days and nights due to climate change (BOM & CSIRO 2007) create an increasingly difficult financial burden for many people with MS.

The Keeping Cool Survey: Air Conditioning Use by Australians with MS, Public Policy Related Results & Recommendations, Dr Michael Summers & Dr Rex Simmons, 2009, found that 90% of the (then) 21,000 people with MS in Australia are sensitive to heat, and run their air conditioners more frequently and for longer periods than most Australians. Nationally, people with MS averaged 1557 hours of air conditioner use annually.

Research conducted for The Keeping Cool Survey in 2009 suggests that people with MS might run their air conditioners 14 times as much as the average Australian household. Economic modelling estimated that average costs for people with MS across Australia from September to April for running their air conditioners were between \$520 and \$693 (based on \$0.15 and \$0.20 per kWh respectively). Not surprisingly costs are higher in the hotter areas with Queensland facing higher costs (\$823–1097 in QLD) and lower in cooler areas (\$296–395 in ACT). For 2007 the estimated average cost of cooling for all Australian households was \$117–156.

This indicates that on average people with MS are estimated to spend almost 4.5 times more on keeping cool than the average Australian household.

¹ Domestic Energy Use by Australians with Multiple Sclerosis including Medically Required Cooling Final Report October 2014, University of South Australia, MS Australia

Economic Impact of MS on Households

Many people with MS struggle financially. In 2010 the average annual disease-related costs to people with MS and their families in Australia was \$10,554 (\$3,697 out-of-pocket and \$6,857 for informal care). There were also significant indirect costs, such as loss of income, which averaged over \$23,000 annually. These findings by Covance and Menzies Research Institute of Tasmania (2011) also observed that direct and indirect costs increase with severity of MS.

While most people with MS are employed when first diagnosed, and 87% are of working age, 80% of these are not employed 10 years after diagnosis (Access Economics 2005). Consequently, 52% of Australians with MS have annual incomes below \$26,000 (Australian MS Longitudinal Study, unpublished data).

The end result is that ultimately most people with MS end up on fixed incomes, often provided through part and full government pension benefits. This combination of low incomes and the high economic costs of MS mean that concessions such as energy rebates are often a critical financial factor in their daily lives, and in their ability to keep cool during hot weather and a deciding factor in whether they make the choice to use their cooling/heating as needed.

Climate

Air conditioner use to keep cool is a direct response to day-to-day weather by people with MS in Australia (Verikios, Summers, Simmons 2013). With an increasing number of hot days and nights, and more frequent and more severe heat-waves, the use of electricity increases for people with MS in their efforts to keep cool, pushing up costs to a group already under considerable economic pressure.

Climate change is leading to an increased frequency and severity of heat waves (Saman et al 2013). Spells of several consecutive days of unusually high temperatures have led to increased morbidity and mortality rates for the more vulnerable in the community. The problem is compounded by the escalating energy costs and increasing peak electrical demand as people become more reliant on air conditioning. As it is understood, domestic air conditioning is the primary determinant of peak power demand which has been a major driver of higher electricity costs.

Response to Energex's Regulatory Proposal Overview 2015-2020 to the Australian Energy Regulator (AER)

Due to a much higher than average energy use, and corresponding costs that are incurred in most homes for people living with multiple sclerosis, MS Queensland supports Energex's funding proposal, as stated in Energex's Regulatory Proposal Overview 2015-2020 to the Australian Energy Regulator to be used for particularly:

- a) Demand management options and energy efficiency schemes which include specific programs and initiatives targeted at residential households with high energy needs who require cooling/heating as a consequence of medical need
- b) To continue advocating appropriate tariff reform to replace direct incentive payments and give customers choice simultaneously with future network tariffs introduction
- c) educating and engaging with customers to bring improved access to energy efficiency advice and greater tariff understanding.

Due to a much higher than average energy use and costs in most homes for people living with MS there is a need for improved access to energy efficiency advice. (Bruno, Oliphant, Summers 2014)

To help minimise energy costs people with MS make minor home modifications to improve the thermal efficiency of their homes more often than the average Australian household. For example, approximately 10% more people with MS have roof and wall insulation in their homes than average Australian households, and are more likely to have external window coverings.

However, notwithstanding these measures to keep their costs down, the high costs of keeping cool, combined with highlighted factors below add greater pressure to those in greatest need to use energy to control their medical condition

- (a) rising electricity prices combined with Future Network Tariffs
- (b) the increasing economic pressures on households generally
- (c) the increasing number of hot days and nights mean it is increasingly difficult for people with MS on low incomes to keep cool on hot days and nights. In 2007, 52% of Australians with MS had annual incomes below \$26,000
- (d) impact of the increase in the uptake and development of alternative energy resources

From a societal perspective this raises a number of public policy issues and challenges:

- ensuring that community service obligations to people who are heat intolerant are met in a way that is effective and equitable;
- maximising the efficiency of cooling for these households to minimise both the economic, environmental and medical costs;
- ensuring consumers are able to access information to equip financially to understand the fast changing consumer electricity environment and its impact to each consumer

These public policy issues and challenges must be resolved in ways that will continue to be effective and equitable in a rapidly changing policy and energy environment which includes:

- the development and implementation of Future Network Tariffs
- the implementation of new technology eg smart meters, electronic interval meters;
- rapidly increasing electricity costs now and into the foreseeable future; and
- more hot days and nights nationally, increasing the need for medical cooling and the associated increasing costs for households. (Summers, M & Simmons, R., 2012 Keeping Cool Survey)

a) Demand management options and energy efficiency schemes should include specific programs and initiatives targeted at households with high energy needs who require cooling/heating as a consequence of medical need.

Developing and implementing effective responses including improved access to the need for people with MS and other heat intolerant people to keep cool involves actions by individuals; families; health, community and professional organisations that work with them; energy retailers and suppliers; and governments at all levels.

The high levels of electricity use by this group, along with their low incomes make them particularly vulnerable to any increases in electricity costs. Demand management options and energy efficiency schemes must be engineered to make sure they include incentives so that people with a medical need can afford to run their air conditioners enough to keep cool on hot days and nights.

Targets set within existing programs, such as Demand management that explicitly target households with significant medically-related energy requirements. (Bruno, Oliphant, Summers 2014). At this time of review and forecast for Expenditure and Review for 2015-2020 specific programs targeted at people who require cooling/heating as a consequence of medical need will be particularly valuable to this group of people.

b) To continue advocating appropriate tariff reform to replace direct incentive payments and give customers choice simultaneously with future network tariffs introduction

MS Queensland supports the continued advocacy for appropriate tariff reform to replace direct incentive payments to provide more equitable solutions to consumers, and particularly for vulnerable consumers, who require cooling/heating due to their medical condition and an inability to change energy use due to a number of factors including:

- Living with a medical condition that requires use of energy to keep well and an inability to alter behaviour ie difficulty in adjusting routines
- Being at home, rather than work means energy use is compulsory during the day for any type of quality of life

Appropriate tariff reform will include the targeted consideration of low income and vulnerable consumers and people living with MS and other medical conditions who have a non-discretionary need to use energy due to their medical condition as current tariff reform proposals such as Time of use tariff will negatively impact the MS community and others who live with heat affected illness.

c) educating and engaging with customers to bring improved access to energy efficiency advice and greater tariff understanding.

MS Queensland encourages improved access to energy efficiency advice and greater tariff understanding. From a MS Queensland Energy Use Survey conducted in 2014 almost 50% would like to learn more about the energy market in Queensland to gain a greater understanding of information.

The introduction of retail costing of alternative tariff structures will require consumers, many who have an inability to take advantage of new technology, to understand the impact of new costing structures. Simultaneously, as there may be a lower growth in demand for electricity as consumers look to access alternative energy sources with considerations such as population growth in Queensland, an ageing population and increase in chronic illness impacting upon the Community Service Obligations (CSO) of Government customers who remain as Energex customers ie the Energex community need further engagement and assistance for equity across SE Queensland so all can receive equal benefit from new technology.

Energy efficiency schemes should include specific programs and initiatives targeted at households with high energy needs who require cooling/heating as a consequence of medical need

More informed consumers will reap the most benefit from any new initiative. An education program, particularly targeted at vulnerable consumer groups such as people with a non-discretionary need to keep cool will assist them to get the most benefit from new tariffs. Schemes such as the Federal Home Energy Saver Scheme (funding ceased) and funding provided to Community organisations to conduct, are ideal to maintain this critical focus.

Ultimately, the adoption of a combination of all three recommendations will assist to reap the strongest economic and environmental results for people who have a medical need to control their body temperature and assist Energex to empower and connect with a targeted vulnerable consumer group who are among the most susceptible to changes in energy pricing.

References

Access Economics 2005, *Acting Positively: Strategic Implications of the Economic Costs of Multiple Sclerosis in Australia*, Access Economics, Canberra

Bruno, F, Oliphant, M & Summers, M., 2014 *Domestic Energy Use by Australians with Multiple Sclerosis including Medically Required Cooling*, p 51

Covance & Menzies Research Institute Tasmania 2011, *Economic Impact of Multiple Sclerosis in 2010, Australian Longitudinal Study*, prepared for MS Research Australia, Chatswood, NSW.

CSIRO 2007, *Climate change in Australia: technical report 2007*, CSIRO and the Bureau of Meteorology through the Australian Climate Change Science Program

Saman W Y, Mudge L., Whaley D. & Halawa E. 2012, Sustainable Housing in Australia: Monitored Trends in Energy Consumption, N. M'Sirdi et al. (Eds): Sustainability in Energy and Buildings, SIST 12, pp. 247-256.

Summers, M. & Simmons, R., 2012, *Keeping Cool Survey: Air Conditioner Use by Australians with MS: Public Policy Related Results & Recommendations*, Copyright © MS Australia.

Verikios, G., Summers, M.P. & Simmons, R. 2013, *The Costs of Keeping Cool for Australians with Multiple Sclerosis*, Australian Economic Review, vol 46, no. 1, pp.45-48