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South Australian Retailer Energy Efficiency Scheme Review – November 2019

AGL Energy (AGL) welcomes the opportunity to provide comment on the Review of the South Australian (SA) Residential Energy Efficiency Scheme (REES) Directions Paper, published by the Department for Energy and Mining (the Department) in October 2019.

AGL has been a major REES participant since 2009 and has delivered positive outcomes for consumers. We have ten years of operating data and experience under the REES and other state-based efficiency scheme. We use this experience and this understanding to inform the services and supports that we provide our customers, including investment in renewable energy generation.

Consideration should be given to how REES can support a sustainable energy efficiency industry while keeping the costs of REES as low as possible should it be extended. We see benefits in retaining the broad objectives of the REES but moving towards greater flexibility in its operation, such as allowing for sites to be revisited, and expanding the scheme to include new types of products. We are concerned that an attempt to extend targets after ten years (in a saturated market), or to try and substantially change the objectives would undermine the purpose of the REES.

Scheme effectiveness

Both residential and commercial energy users have a role to play in reducing energy demand. We are supportive of initiatives that assists consumers understand their energy usage and makes appropriate changes to improve it. We consider this is important for all customers irrespective of their size, usage or previous assistance.

However, as expressed in the Directions paper, there would now be 5 targets, one of which – the Productivity Target – has not yet been defined. The other 4 targets are:

- Overall target
- Residential Target
- Priority Group Target
- Regional Target (15%)

AGL considers this structure for the scheme is overly complicated and will inadvertently make it more expensive and difficult for retailers to comply with. We note that the REES is already more expensive than the Victorian and NSW mandatory energy efficiency schemes. If the REES is amended as proposed, these costs will necessarily increase and will result in flow on costs to all

South Australian customers. Alternatively, we believe the South Australian Government should focus on the following matters, which are not raised in the Directions Paper, which would help to minimise the costs of meeting targets but continue to deliver energy efficiency benefits in line with the objective of the REES:

- new residential products;
- a multiplier for expensive deep energy use cuts (e.g. heating & cooling devices); and
- new categories for Priority Groups. For example, a Carer and a Carer's Allowance card could be added to Priority Group customers.

To further minimise the costs of the REES without compromising the benefits, AGL makes the following suggestions on issues raised in the Directions Paper:

- There should not be a separate Priority Group target, but instead a Residential target that provides incentives for Priority Group activities, such as through:
  - a multiplier for activities in Priority Group households; or
  - a fund set aside as part of REES to properly target these households. As suggested in our previous submission, AGL supports exploration of opportunities to use REES to fund a stand-alone low-income program. The structure, governance and purpose of such a program would need to be carefully considered for alignment with the overall objectives of the REES scheme.
- If the South Australian Government wishes to drive further activity in regional areas, targets for Regional customers should not be separate to Residential or Priority Group targets and should instead be incentivised through a multiplier.

We have provided detailed responses to the proposed directions in the following attachment along with several recommendations.

Should you have any questions please contact Jenessa Rabone at JRabone@agl.com.au or 02 9921 2323.

Regards

[Signed]

Con Hristodoulidis

Senior Manager Energy Markets Regulation

Appendix A

3.1.1 An updated scheme will commence on 1 January 2021.

AGL is concerned that the new scheme criteria will not be available early enough for retailers and their third-party providers to commence on this date.

The same issue occurred when commercial lighting was introduced on 1 January 2015. The rules were not finalised with ample time for implementation, ESCO staff were not skilled up to advise on commercial lighting evidentiary requirements or operating rules. As a consequence, AGL was required to withdraw about 100,000 GJ of jobs in December 2015, as the rules had changed since the jobs were done.

Thus, we recommend a planned phase-in stage, with new products (such as those proposed for the commercial sector) only being eligible once adequate consultation has occurred and procedures are finalised.

3.1.2 The updated scheme will require three yearly target re-sets.

AGL supports this Direction.

3.1.3 The updated scheme will be reviewed after six years.

In section 3.4.1 below we recommend that the scheme be reviewed after three years to re-consider whether and how demand response should be included in the scheme.

3.1.4 The updated scheme will restrict credit carryovers from the current scheme to 10% of the 2020 target. The credit carryover from 2020 will be applied in 2021 only.

AGL supports the sentiment of this Direction but suggests a larger carryover restriction (e.g. 20 per cent) should be applied to avoid unintended consequences. If the restriction is too low, there would be a risk of installers having to cease work for several months. Activity providers may be required to stand down staff and then re-employ them the following year, which is a poor outcome for staff and could result in loss of knowledge or require re-training. Ideally the workload for installers would be as consistent as possible over time.

We also note that the large carryover that occurred in 2014 is not likely to occur again. That carryover was due to transitional multipliers and impending changes of abatement values at the time. There will not be the activity credits available to carry over this time due to the constrained market.

3.2.1 The updated scheme objective will be 'To improve energy productivity for households, businesses and the broader energy system, with a focus on low-income households. This will reduce energy costs and greenhouse gas emissions, whilst improving human health'.

AGL is concerned with changing the objective without fully understanding how this objective would be measured and achieved in practice. Further commentary is provided in sections 3.4.1 and 3.4.2.

AGL recommends that the objective not be changed for the time being, until further work is done is on energy productivity. This could be reviewed again in three years as proposed under section 3.4.1.

3.3.1 The updated scheme will require that, in circumstances where activities delivered in regional areas fall below 15% of the overall target, regional obligations will apply for retailers in the year following the shortfall.

AGL anticipates that setting a separate Regional target will increase the administrative and marketing costs of the REES, which is likely to therefore impact energy costs for South Australian customers. If the South Australian Government wishes to focus a proportion of REES activities to regional areas, the Residential Target component of REES should include an appropriate multiplier to reflect the additional costs involved in servicing these areas and therefore place a downward pressure on the costs of delivering the REES.

3.4.1 The updated scheme will help to avoid future network costs by incentivising demand response activities as well as energy savings in the commercial and residential sectors.

AGL considers that there is value in increasing the number of demand management (DM) enabled devices in households (that is, fitted with appropriate remote comms/control capability). This would assist those customers with participating in demand response programs, which could help those customers to decrease energy costs.

However, we note that there is a material difference between demand management, which may involve turning off a non-energy efficient appliance for a short period of time, and energy efficiency. In particular, it is not possible to calculate energy savings from the installation of DM enabled devices, as this depends on the amount of DM that occurs in response to signals from the market. This calculation of energy savings is fundamental to the REES, and therefore we are concerned with the practicalities of including DM enabled devices in the REES.

Aside from the issue of calculating energy savings, we also suggest that the South Australian Government await the outcomes of several important projects that are currently underway before the REES is expanded to include the installation of DM enabled devices.

1. Standards Australia is currently reviewing "AS4755.2 - Remote demand response framework", which outlines an updated method of providing demand response that may be used by manufacturers of DM enabled devices.

2. There are currently three DR pilot projects underway in South Australia, as well as other DR trials across the NEM. There will be significant learnings from these projects that should inform the types of devices that would ideally be installed and used in households.

In AGL's experience, customers may be more willing to use certain types of devices in DM activities more than other types of devices. For example, in the 2nd year of our ARENA NSW Demand Response Program, we found that there is a reluctance for households to allow third parties to control air conditioners, despite attractive incentives for participating in the program and the ability to opt-out of events. On the other hand, customers seemed more willing to allow control of the charging times for their electric vehicles. While these findings are currently anecdotal and do not involve large number of customers, we consider the next few years of trials will be instrumental for understanding the behaviour and drivers of customers and will determine where the most value can be gained from demand response and demand management activities.

For these reasons, AGL suggests that incentivising demand response activities not be included in the REES at this stage.

Instead, the REES should be reviewed after three years (instead of six years) to determine whether to include installation or retrofitting of DM enabled devices. Learnings from the next few years of trial programs will inform exactly how this should be done.

In addition, we consider that any DM enabled devices that are being installed based on reducing peak demand or increasing DM capability should include two-way communications capability and should be programmed to avoid causing an even larger peak post-event. Otherwise the activity could cause a large spike in demand at the end of the event, with no feedback as to whether the activity delivered the desired DM until the interval data is accessed.

Should the South Australian Government include DM activities in the REES at this stage, we suggest that the REES could draw from activities undertaken by retailers that are registered in AEMO's Demand Side Participation portal.

3.4.2 The scheme will have an energy productivity target, expressed using a gigajoules (GJ) metric.

AGL notes that the South Australian Government will consult further on the calculations for this metric during the post review stage (mid-2020).

We are very interested to understand how this metric would be different to other targets and how it would be calculated and consider that this work should be undertaken prior to changing the objective of the REES and applying a productivity target. AGL is concerned that 'productivity' is too fundamentally different to energy efficiency to be included in the same scheme design.

3.5.1 The updated scheme will promote greater competition between third party activity providers.

The Direction Paper suggests that the following obligations be introduced under the REES:

- requiring retailers to conduct an annual, open tender if using third parties to deliver energy saving activities;
- requiring retailers to report to ESCOSA annually on opportunities that they had given to new providers to compete for the delivery of energy savings.
- requiring retailers to price at least 50% of eligible activities and report to ESCOSA annually;
- requiring reporting on the cost for energy savings and the number of providers engaged over the reporting period;
- allowing third-party providers to register with ESCOSA on a supplier register, amend ESCOSA's annual reporting requirements to reflect any increased reporting by retailers.

The 'Open-Tender' initiative has been outlined in the Directions Paper as one that will 'reduce scheme costs'. However, AGL believes the more Activity Providers used by a Retailer would substantially increase the costs associated with contract governance, administration and compliance.

AGL actively recruits providers depending on our needs and the ability of the contractors to deliver quantity and quality. It takes many months to upskill new contractors to both AGL procedures and REES requirements, and there are additional costs associated with undertaking an IT security review and setting up a secure portal between AGL and contractors in order to securely transfer customer data.

It is also important that we can cease using contractors should they not meet requirements, such as safety and technical credentials, lack of REES knowledge, low capacity to take on large volumes of certificates, poor compliance levels and inappropriate customer conduct. We are ultimately responsible for our Activity Providers' work.

AGL has recently onboarded two additional Activity Providers. This process has taken months due to the process we apply to any new contracts (especially those where there is a high degree of risk due to the nature of the work). While AGL intends to continue to periodically tender for new competitive vendors as required to meet our obligations but also keep our cost as low as possible, if we are required to repeat this tender and recruitment process annually the REES cost per customer will increase. We therefore recommend that this requirement not be introduced.

We also consider the prices of eligible activities should not be publicly reported by ESCOSA, as this could inadvertently cause anti-competitive outcomes and price convergence over time. This type of information is commercial in confidence.

3.5.2 The Government will consider alignment of scheme activity rules with interstate schemes, where appropriate and ensuring continued high-quality outcomes for consumers.

AGL supports this Direction.

Not only would this result in fairer outcomes for customers in different jurisdictions, but it can help to reduce the administrative costs for industry operating in different jurisdictions.

Below we provide several examples where there could be greater alignment:

- NSW decided to incentivise large commercial lighting upgrades, with the effect that South Australia lighting upgrades decreased by over 30%. The ACT scheme found an easy workaround to avoid these market and customer impacts, but this has not yet been addressed in South Australia and encourage alignment with other jurisdictions.

- The dependency on NSW ESS tools to verify abatement rates in South Australia has caused adverse impacts on the market and introduced discount factors that are not reflective of the market conditions and the non-tradeable nature of REES. NSW ESS has a tradeable framework which allows Activity Providers to have a price response when changes occur to abatement. Because it is a retailer, not a certificate-based scheme, REES does not have this flexibility and thus costs go up when abatements arbitrarily are lowered.
- The residential downlight abatement was decreased in 2017 by between .02 and 3.35 GJ per bulb on the assumption that all broken lights will be upgraded to LED. However, we are not seeing this. Priority Group households, rentals and SMEs continue to replace broken lighting with the lowest possible cost option. This also means there is now a significant difference with abatement levels in NSW and Victoria. The value for residential lighting should be the same across all state-based energy efficiency schemes.

3.6.1 The updated scheme will incentivise upgrades in larger businesses by not including a 900 GJ limit for commercial lighting upgrades.

AGL supports this Direction.

3.6.2 The updated scheme will allow commercial lighting upgrades to be delivered more than once per premises, where it can be demonstrated the lamps being replaced had not previously been replaced for the purposes of the scheme.

AGL supports this Direction.

3.7.1 The updated scheme will incentivise upgrades in larger businesses by introducing new commercial and industrial activities, such as upgrades of fans, pumps and motors.

AGL supports this Direction.

However, we note that commercial lighting activities will cease to be economically feasible as of 1 May 2020, when the new National Construction Code (NCC) Section J (Energy Efficiency) comes into force. The NCC is written for new buildings and not retrofits, and the explicit aim of the new Code is to reduce GHG emissions through improvements in energy efficiency. One of the pillars is to increase the amount of daylighting in new buildings – which reduces the need for lighting levels (Sections J6.2-5, pp 407 Guide to Volume 1).

The consequence of the NCC and Australian & New Zealand lighting standard 1680 (Volume 1, F4.4(b)) is that, to comply with the NCC, retrofitted buildings will be underlit and not fit for purpose.

Both the Department and ESCOSA have advised REES participants in writing that they are unwilling to change their direction on this. The ACT, NSW and Victorian governments have inserted clauses into their energy efficiency scheme legislation to identify which parts of AS/NZS 1680 should apply.[1] AGL strongly suggests that this issue be reconsidered to avoid unintended outcomes.

An analysis of the forthcoming decreased values for artificial lighting are contained in Appendix B.

3.7.2 The updated scheme will incentivise upgrades in larger businesses by introducing new methods such as the NABERS Baseline Method, Power Factor Correction Method, and Project Impact Assessment Method.

AGL supports this Direction.

However, we believe the NABERS and PIAM / PIAM & V methodologies should be synchronous with those in NSW and Victoria. These methodologies are difficult to learn and correctly implement. Some methodologies also take up to a year to realise.

AGL supports the introduction of Power Factor Correction (PFC) activities, as these will assist in the stabilisation of the South Australian distribution network.

Taking lessons from the QLD Energex Demand Response/PFC program, AGL suggests that a minimum kVar is stipulated, and SAPN is consulted as to the maximum kVar required (in QLD this was 0.98 kVar). The installer is then rewarded on the increase in kVar.

However, as this is not a reduction in energy use but an increase in energy productivity and grid stability, a methodology needs to be developed to incentivise and reward PFC at the NMI level in GJ.

3.7.3 The updated scheme will require customer co-payments for all commercial and industrial activities.

AGL does not support this Direction.

Many small businesses cannot afford the upfront costs involved in these upgrades, even with financing assistance.

AGL considers that Retailers should be able to decide whether a contribution is added or not, as per the UK Energy Company Obligation (ECO3)[2]. Retailers have incentives to meet their targets, and it is better that there is energy reduction regardless of whether the customer provides a co-payment or not.

AGL is aware that paying for an item increases the customer's value for it. It is worth noting businesses have finite capital in making decisions on how to spend they need to consider other input costs (such as goods, services, staff and a premises). Hence, the scheme should provide as much flexibility as possible to encouraged participation.

[1] Correspondence to Craig Walker, August 2018. 'VEU has two different upgrade options; ones that needs to comply with NCC section J6 and ones that don't i.e. Commonly Retrofits – (NON-J6 upgrades). If a site is undergoing a renovation that requires a building permit and the lighting is part of that, then the job must comply with all aspects of the NCC J6, this is not necessary in standard lighting only retrofits.

[2] https://www.ofgem.gov.uk/environmental-programmes/eco/support-improving-your-home/faqs-domestic-consumers-and-landlords

3.8.1 The updated scheme will introduce a residential target, alongside the priority group target.

AGL does not support this Direction, as set out in our cover letter.

We understand that the additionality of a multiplier could skew reporting statistics. However, in a similar manner to commercial lighting sites where upgrades have been over 900 GJ, an additional column could be added into the REES Registry to record the values over the GJ assigned in the legislation. In this way, deep energy cuts for customers – and the reduction of energy poverty in some households – could be achieved at minimum /no cost to the households. This should also contribute to much better health outcomes for Priority Group customers.

We believe that a similar situation will be seen with SME businesses and HVAC systems – most SMEs are in leased premises and landlords are historically unlikely to spend money on their tenant's comfort ('split incentive'). However, should there be minimal, or no financial co-payments required, then SME customers could be able to access and achieve more favourable working conditions.

3.9.1 The updated scheme will have a priority group target.

AGL does not support this Direction, as set out in our cover letter.

3.9.2 The updated scheme will include rental households within the definition of 'priority group'.

AGL supports this Direction.

However, we would like to raise some potential administration and compliance issues that may undermine the scheme and cause unnecessary costs.

An Activity Provider would likely require a resident to prove that they are a renter to access the REES for free. There would be administrative costs involved in reviewing documentation or verifying that the resident is a tenant, which may create barriers to using the scheme.

Depending on the nature of the obligation, there could also be difficulty in proving that a household is renting. Therefore, AGL recommends that achievable but not arduous evidence needs to be required for this activity.

In addition, as per above, a multiplier needs to be added to activities to be undertaken to achieve deep cuts in energy bills and increases in health outcomes – as landlords will usually not pay for upgraded air conditioning and heating. The current residential retrofit activities of standby power controllers, LED bulbs and low flow showerheads are good, but do not make a significant savings contribution to a Priority Group household's energy bill.

3.9.3 The updated scheme rules will be reviewed for other opportunities to overcome the landlord/tenant split incentive problem.

While AGL supports this Direction, we note that there still may be difficulties in seeking landlord agreement to the upgrades.

3.10.1 The updated scheme will introduce co-payment requirements for all residential activities, except for priority group households.

AGL does not support this Direction.

As discussed in section 3.7.3, we consider that co-payments are not sustainable for residential and many SME customers. Retailers should be able to decide whether a co-payment is necessary for the activity to be completed, and the size of any co-payment.

We also refer to the UK ESO3 legislation, which provides an effective and illustrative policy for co-payments.

3.10.2 The updated scheme rules will incentivise deeper retrofits to priority group households.

AGL in-principle supports the intended outcomes of this Direction.

We seek further clarification on which activities would be incentivised and the associated GJ allocations. We would like to avoid a REES that provides a rebate that is less than the value of the activity or device to be installed.

3.10.3 The updated scheme rules will incentivise residential activities that reduce peak demand or increase demand response capability.

Please see our comments to 3.4.1 above.

3.10.4 The updated scheme will look at options to assist customers with financing for deeper retrofits.

AGL looks forward to working with the South Australian Government on this Direction.

3.11.1 The updated scheme will no longer include residential audits and retailers will no longer be required to meet annual energy audit targets

AGL has no comment on this Direction.

Appendix B: Changes in IPD (illuminance) to conform with the new NCC and AS/NZS 1680, 1 May 2020

Location	AS 1680 recommended illuminance, lx 2020	Maximum IPD W/m^2 2016 – 1 May 2020	Maximum IPD W/m^2 1 May 2020	Change
Auditorium, church and public hall	160	16	8	-8
Board room and conference room	240	24	5	-19
Carpark -general	40	6	2	-4
Carpark –entry zone (first15 m of travel)	800	25	11.5	-13.5
Carpark –entry zone (next4 m of travel) during daytime	160	-	2.5	n/a
Carpark –entry zone (first20 m of travel) during night-time	160	-	2.5	n/a
Common rooms, spaces and corridors in a Class 2building	160	-	4.5	n/a
Control room, switch room and the like –intermittent monitoring	160	9	3	-6
Control room, switch room and the like –constant monitoring	240	9	4.5	-4.5
Corridors	240		5	-5
Courtroom	320	12	4.5	-7.5
Entry lobby from outside building	160	15	9	-6
Health-care –infants 'and children's ward and emergency department	240	10	4	-6
Health-care –examination room	400	10	4.5	-5.5
Health-care –examination room in intensive care and high dependency ward	400	10	6	-4.5
Health-care – Kitchen and food preparation areas	240	8	4	-4
Healthcare wards and corridors	240	-	2.5	n/a

Laboratory -lit to 400lx or more	400	12	6	-6
Library –stack and shelving area	240	12	2.5	-9.5
Library –reading room and general areas	320	10	4.5	-5.5
Lounge area for communal use in a Class 3or 9c building	240	-	4	n/a
Museum and gallery -circulation, cleaning and service lighting	240	8	2.5	-5.5
Office –artificially lit to an ambient level of200lx or more	320	9	4.5	-4.5
Office –artificially lit to an ambient level of<200lx	160	7	2.5	-4.5
Plant room where an average of160lx vertical illuminance is required on a vertical plane	160	5	4	-1
Plant room with a horizontal illuminance target of80lx	80	5	2	-3
Restaurant, café, bar, hotel lounge and a space for the serving and consumption of food or drinks	80	18	14	-4
Retail space including a museum and gallery whose purpose is the sale of objects	160	22	14	-8
School -general purpose learning areas and tutorial rooms	320	8	4.5	-3.5
Sole-occupancy unit of a Class 3or 9c building	160	-	5	n/a
Storage	80	10	1.5	-8.5
Service area, cleaners' room and the like	80	5	1.5	-3.5
Toilet, locker room, staff room, rest room and the like	80	-	3	n/a
Wholesale storage area with a vertical illuminance target of 160lx	160	10	4	-6
Stairways, including fire-isolated stairways	80	-	2	n/a
Lift cars	160	-	3	n/a