

Essential Services Commission of South Australia (ESCOSA)

Email submission to: escosa@escosa.sa.gov.au

Attention: Tamsyn Hinksman

Submission in response to:

Cowell Electric Supply Pty Ltd licence amendment: Proposed prepayment by default consumer protections

Submission by:

Brad Riley at the Australian National University's Centre for Aboriginal Economic Policy Research <https://researchers.anu.edu.au/researchers/riley-b>

Dr Lee White at the Australian National University's School of Regulation and Global Governance <https://researchers.anu.edu.au/researchers/white-lx>

Sally Wilson at the Australian National University's School of Regulation and Global Governance <https://regnet.anu.edu.au/our-people/academic/sally-wilson>

Dr Thomas Longden at the Australian National University's Crawford School of Public Policy <https://researchprofiles.anu.edu.au/researchers/thomas-longden>

Dr Simon Quilty at the Australian National University's Research School of Population Health <https://researchers.anu.edu.au/researchers/quilty-s>

Michael Klerck, Social Policy and Research Manager at Tangentyere Council; University of Newcastle <https://researchers.uon.edu.au/researchers/klerck-m>

Vanessa Davis, Senior Aboriginal Researcher at Tangentyere Research Hub; Tangentyere Council <https://tangentyere/researchers/davis-vn>

Norman Frank Jupurrurla, Julalikari Council Aboriginal Corporation, Tennant Creek NT <https://julalikari.org.au>

Dr Lily O'Neill at the Australian National University's Centre for Aboriginal Economic Policy Research <https://researchers.anu.edu.au/researchers/o-neill-l>

Brad Riley, Dr Lee White, Dr Thomas Longden and Dr Lily O'Neill are Research Fellows working on the Australian National University's Grand Challenge: Zero Carbon Energy for the Asia-Pacific.

Summary

Generally, as we outline in our submission below, we submit that the use of prepayment metering should always be the voluntary and informed decision by the customer, rather than mandated. Further:

- The introduction of mandatory prepaid electricity in affected communities should not precede ESCOSA’s overarching off-grid energy consumer protection framework review.
- The mandatory nature of the introduction of prepaid electricity has been opposed by a range of community-based stakeholders in numerous previous submissions.
- During the current COVID-19 crisis, which has only recently begun to impact many remote Aboriginal communities, energy policy at national, regional, and municipal levels have seen regulators and utilities rapidly enact measures to ameliorate the impact of disconnection from energy service. This has included disconnection moratoriums for post-pay customers. In this context, we observe the timing of the proposed rollout has the potential to compound extant socio-economic and health inequities.
- We strongly support the quarterly reporting metrics related to monitoring the frequency and duration of disconnection events. However, we are concerned that the draft decision fails to mention whether reported data will be publicly available.
- The introduction of a new payment system should be linked to consideration of how rooftop solar PV installed in public housing within affected communities may support those experiencing payment difficulties and (foreseeable) disconnection.
- Several of the questions in the draft decision consultation indicate that there is a working assumption that people who are unable to pay will go without power and further, that prepayment could be used as a debt recovery mechanism in households already disadvantaged by location, inadequate, overcrowded and energy inefficient housing, and generally lower incomes and challenging access to thin labour markets.
- We support SACOSS’ call to delay implementation and for further deliberation by the new state government in consultation with affected communities.

1. Introduction

Thank you for the opportunity to make a submission in response to the minimum consumer protections set out in the Essential Service Commission of South Australia's ('ESCOSA') draft decision, *Cowell Electric Supply Pty Ltd licence amendment: Proposed prepayment by default consumer protections* ('draft decision'). The draft decision seeks to implement the South Australian Government's *Electricity (General) (Payment Condition) Variation Regulations 2021* ('Regulations'), which introduce user-pays via mandatory prepaid electricity metering exclusively affecting Indigenous households in the Anangu Pitjantjatjara Yankunytjatjara (APY) Lands, Yalata, and Maralinga Tjarutja/Oak Valley ('affected communities'). The changes are proposed to commence on 1 July 2022.

As ESCOSA and the Department for Energy and Mining ('DEM') have made clear, and we acknowledge, the issues raised by the staged introduction of electricity charging, and in particular the preferred method of mandatory prepayment, are complex and the potential for unintended consequences are real.

Our research team has previously contributed submissions informed by our published research as this policy issue has progressed, including to DEM and ESCOSA [1, 2]. In doing so our purpose has been to present new evidence and data in an important area of policy, for which public monitoring and reporting have previously been scant. Researchers in our team have recently published findings from comparable jurisdictions which relate to those decisions currently being made by ESCOSA and the South Australian Government about the introduction of mandatory prepaid electricity in remote Aboriginal communities in South Australia.

Our previous submissions on these issues are available at the following links:

- [April 29th 2021 Submission in Response to Prepayment Meter System Code Review](#)
- [September 14th 2021 Submission in response to the Consultation on proposed amendments to customer payment under the South Australian Remote Area Energy Supply \(RAES\) Scheme \(Issues Paper July 2021\)](#)

- [March 25th 2022 Submission in response to: Consultation paper: Off-grid energy consumer protection framework review Prepayment Meter System Code review—Update paper](#)

Our submission here focuses on the critical need for customer choice based on the principle of Free, Prior and Informed Consent ('FPIC') as expressed in the United Nations Declaration on the Rights of Indigenous Peoples (UNDRIP) and on the need for protections and safeguards preventing pre-pay customers, many of whom have limited capacity to pay, from experiencing hardship associated with disconnection from those services that access to electricity provides.

Evidence shows that the current regulatory approach introducing user-pays based on mandatory prepaid metering has as its chief risk 'involuntary self-disconnection', of households within affected communities, which in turn impacts upon social and health inequities otherwise identified and prioritised in Closing the Gap targets [3-5]. Our view is that the draft decision implements policy that fails to provide adequate protections from the known risks and harms of involuntary self-disconnection from electricity.

We wish to acknowledge the significant time and effort taken to get to this point. In particular we wish to commend the efforts of ESCOSA in attempting to develop meaningful safeguards and protections for residents of affected communities, while recognising the significant operational constraints inherent in such an undertaking.

We encourage ESCOSA, working with State Government and other stakeholders, to reassess the draft decision by meaningfully engaging with the affected communities to develop fair and sustainable remote energy systems that align with community-identified priorities and needs, and that minimise the potential for harm.

[2. General feedback on ESCOSA's draft decision](#)

Firstly, we note that the mandatory nature of the introduction of prepaid electricity in remote Aboriginal communities across South Australia is opposed by each of the community-based stakeholders to have publicly contributed submissions previously. We refer ESCOSA to SACOSS' submission to the Parliamentary Review Committee dated 12 April 2022 [6]. In it, SACOSS observes that of those submissions received during the initial

consultation undertaken by DEM regarding the proposed introduction of user-pays for electricity customers residing in public housing in the affected communities, none supported mandatory prepayment [7].

Submissions were received from MoneyMob Talkabout, Consumer Action Koori Help, Mob Strong Debt Help, Financial Rights Legal Centre, Purple House, and from Uniting Communities, as well as our group from the Australian National University [8].

Secondly, as a matter of procedure and in the interest of fairness, the introduction of mandatory prepaid electricity in affected communities should not precede ESCOSA's overarching *Off-grid energy consumer protection framework review* – it should be subject to parliamentary review and further deliberation by the new State Government [9]. As such, our research team supports SACOSS' call for the South Australian Legislative Review Committee to apply scrutiny principles to the Regulations, as a justified safeguard for 'prescribed customers'—i.e., the more than 2,154 Aboriginal residents of public housing in the affected communities—whose rights are set to be impacted by the regulatory changes.

For our part, and concerning the likely impacts of mandatory prepaid metering, we refer ESCOSA to very recently published quantitative findings from smart-meter data for 28 remote communities utilizing prepay in the Northern Territory [5]. This research details the frequency and duration of involuntary self-disconnection events experienced by remote-living Indigenous prepay customers, including during times of inclement weather and during temperature extremes. The results provide evidence (taken from 1,674,786 daily observations across 3,300 households) of an unprecedented level of energy insecurity—rates of involuntary self-disconnection are shown to be much higher than either Australian or international examples.

- The research paper is available at the following link: rdcu.be/cDIYQ
- The Policy Brief is available: <https://www.nature.com/articles/s41560-021-00968-6>
- Background on Tangentyere Research Hub's work on energy insecurity in Central Australia is available at: go.nature.com/31WxDNn

Additionally, the introduction of mandatory prepayment during the ongoing COVID-19 pandemic is likely to interact with, and has the potential to compound, other risks remote living residents are facing during this time.

In this regard we refer ESCOSA to an open letter dated 16 February 2022, from the following community-based health organisations in the Northern Territory calling for a ‘Moratorium on Electricity Disconnections in Indigenous Communities during COVID-19 Response’ [10]:

- Purple House
- Tangentyere Aboriginal Council
- Julalikari Council Aboriginal Corporation
- Australian Medical Association Northern Territory (AMSANT)
- Housing for Health Incubator
- Australian Lawyers for Remote Aboriginal Rights
- Yinjiya Guyula MLA
- Original Power.

As observed by these organisations, and in the context of the COVID-19 crisis now impacting remote-living residents, involuntary self-disconnection from household energy services can serve to encourage people to move—potentially between infectious and non-infectious households—while simultaneously compromising household and community food security and affecting people’s means of securing reconnection to essential services through power card top ups from community stores.

For reference, the open letter from NT health organizations is available at:

[https://d3n8a8pro7vhm.cloudfront.net/originalpower/pages/4/attachments/original/1645001985/Call for Moratorium on Electricity Disconnections in Indigenous communities during NT COVID-19 Response.pdf?1645001985](https://d3n8a8pro7vhm.cloudfront.net/originalpower/pages/4/attachments/original/1645001985/Call%20for%20Moratorium%20on%20Electricity%20Disconnections%20in%20Indigenous%20communities%20during%20NT%20COVID-19%20Response.pdf?1645001985)

The implementation of mandatory prepaid metering, with its known risk of involuntary self-disconnection, and inadequate protection from those risks, runs contrary to ESCOSA’s primary objective to independently protect the long-term interests of South Australian consumers with respect to price, quality and reliability of essential services [11]. The changes implemented by the draft decision place the most disadvantaged households in

South Australia at a further disadvantage, including to other consumers in the state who are not subject to mandatory prepayment, and who benefit from greater extant protections from the disconnection from essential services [12]. It is our position that utilising a schedule to the licence between ESCOSA and the privately-owned utility, Cowell Electric Supply Pty Ltd ('Cowell Electric') to implement consumer protections for residents of the affected communities has the practical effect of diminishing the rights of these households relative to other off-grid customers.

Protections for other off-grid customers are contained in the Prepayment Meter System Code ('PMSC') [13]; a visible, accessible standalone instrument subject to review and public feedback from time to time. By contrast, a schedule to the licence agreement is far less visible and accessible to the customers whose rights and obligations it impacts. Additionally, there is no guarantee of regular review of, or public input into, the minimum protections contained in a schedule to the licence. Section 27 of the *Electricity Act 1996* (SA) provides that variations to the licence may only be made upon application by the utility, Cowell Electric, or by ESCOSA after providing the utility (but notably, not others) reasonable opportunity to make representations about the variation.

We note that the draft decision states that the proposed regulatory changes will impact approximately 1,050 customers [14]. It is our understanding that this figure reflects the number of public housing electricity meters in affected communities—not the number of people receiving essential electricity services in those communities. The number of individuals affected by the introduction of mandatory prepayment is likely to be more than 2,154 across the APY Lands, Yalata and Maralinga Tjarutja/Oak Valley based on 2016 ABS Census data [15-17]. Actual population numbers are likely larger due to Census undercounting, high levels of mobility, and increased numbers of people returning to affected communities due to the COVID-19 pandemic (whereby residents have moved away from larger centres).

With these caveats in place, we provide feedback in relation to the five specific questions posed by ESCOSA in relation to the draft decision.

While seeking to address these questions according to our experiences and expertise, we wish to reflect that these questions are no doubt best answered by the affected communities themselves. It is their families that will live with this exceptional situation and their households which will be directly impacted by the draft decision. This further highlights the need for meaningful consultation together with affected communities before significant changes are implemented that will limit their choices, rights, and obligations in respect of essential service delivery.

1. Do the proposed protections adequately address concerns about communication accessibility for prescribed customers? If not, what protections do you propose?

No, the proposed protections do not provide affected households with a guarantee to information in accessible forms. There are significant contradictions in the proposed protections concerning the utility's obligations to provide information to affected customers in their own first languages e.g., Aboriginal languages including Pitjantjatjara and Yankunytjatjara.

General obligations to provide information to 'prescribed customers' in accessible forms are set out in Schedule 2, clause 1.4. However, the obligation is limited to the utility using best endeavours upon request by a customer in relation to provision of the written disclosure statement and prepayment meter operating instructions in first languages (see Schedule 2, clauses 1.5.2 and 1.6.2, respectively). Both are fundamental documents for the implementation of the user pays and prepayment meter systems in communities where most people's first languages are other than English.

We observe that the use of 'best endeavours' upon request follows the model used in the National Energy Retail Rules (NERR) e.g., Rule 131(2) in relation to the provision of a prepayment meter system operating manual in a language other than English. However, given that the introduction of mandatory prepaid metering is intended to exclusively impact residents who are first language speakers of Aboriginal languages it follows that they should be guaranteed access to written documents in those languages, alongside customer services in their primary spoken languages.

2. Do you support the option to provide prescribed customers with the option to opt-in to self-disconnection between 10am and 3pm on weekends? If not, do you propose the protected period over the weekend remain or be removed?

This question is inherently problematic. It is evidence of a working assumption that people who are unable to pay will go without power. It demonstrates the unenviable choice facing disadvantaged households, between disconnection from those essential services that electricity provides, and the accumulation of debt. If mandatory prepayment is to be implemented in the affected communities, there must be adequate protections from involuntary self-disconnection and the known harms this represents. We note that a provision permitting residents to 'opt-in' to self-disconnection on weekends directly contradicts the principle of disconnection as a last resort and the protections afforded by NERR Rule 129(3) and PMSC clause 3.3.1(b).

We do not support any changes which provide lesser protections to the affected communities than those enjoyed by other South Australian electricity customers. Assuming mandatory prepayment metering is to be implemented, ESCOSA should seek to meaningfully engage with affected communities to co-design fit for purpose consumer protections that adequately address those risks which remote households using prepaid metering are known to experience.

3. Do you support a maximum 20 percent of each top-up payment going to pay down prescribed customer debt? If not, what should the ratio between debt payment and top-up amount be?

We oppose the use of prepayment metering systems as a debt recovery mechanism in remote and disadvantaged households.

The concept proposed in the draft decision contradicts protective benchmarks established by NERR Rule 133 and clause 2.5.1(f) of South Australia's PMSC. These frameworks have been developed based on the principle that debt recovery should not be permitted through the metering system, except in exceptional cases such as undercharging or illegal energy use.

Moreover, the proposal concerning debt recovery draws attention to other weaknesses in the proposed protections around variations to rates and charges. Our understanding is that DEM intends to introduce the user-pays system in affected communities at the initial reduced rate of 10c/kWh, with rates to be increased over time to the standard residential consumption tariff (currently 32c/kWh with a daily supply charge of 88.7c/day) [18, 19]. Under the proposed protections, and in the absence of a definitive statement to the contrary, this increase could happen with 20 days' notice to residents by Cowell Electric as set out in Schedule 2, clause 2.11. This process provides inadequate protections for disadvantaged households from sudden rate increases, which could foreseeably exacerbate levels of involuntary self-disconnection amongst communities newly paying for electricity supply under the proposed arrangements.

4. Do you support the proposed reporting metrics and the quarterly timing of these reports? If not, what other metrics or timing requirements do you propose?

We support the quarterly timing of reporting metrics and the proposed metrics relating to monitoring of the frequency and duration of disconnection events. That said, we encourage ESCOSA to consider additional metrics as specified in our previous submission dated 25 March 2022 to enable ongoing review and assessment of the full impact of the use of prepayment metering in affected communities [2]. The additional metrics previously outlined include:

- numbers of prepayment customers self-reporting or identified as experiencing hardship;
- numbers of customers who have requested to revert to post payment metering;
- numbers of customers who have reverted from prepayment to post payment metering;
- numbers of registered life support customers;
- numbers of complaints received from prepayment meter customers; and
- proportion of disconnections above and below temperature thresholds specified in consultation with climate experts and/or epidemiologists.

Given the concerns we have expressed regarding debt recovery mechanisms being part of prepayment metering systems, we consider the reporting metrics concerning payment splitting arrangements as unwarranted and unnecessary.

We are also concerned that the draft decision fails to mention whether reported data will be publicly available. Moreover, there is no clear connection between the reporting and monitoring requirements, the outcomes of this reporting, and any future changes (i.e., increases) to the 'introductory' tariff as flagged in the draft decision. As currently framed, it suggests that data will be provided to ESCOSA for its review with no subsequent obligations around public disclosure.

Our view is that ESCOSA be required to publish the information online and in a timely manner so that it is available to residents and communities, those community-based housing and health organizations to whom the task of mitigating household energy insecurity will likely fall, and their advocates. As stated in our previous submission, there is a need to ensure that the energy data (e.g., Consumer Data Right – Energy, as expressed in the National Energy Market) of Aboriginal communities are secured and leveraged for Aboriginal benefit. The Council of Australian Governments 'Closing the Gap in Partnership: Priority Reform Four' calls for the greater sharing of, and access to, data and information at a regional level [20], recognising that "disaggregated data and information is most useful to Aboriginal and Torres Strait Islander organisations and communities to obtain a comprehensive picture of what is happening in their communities and to support decision-making" [3].

5. Do you support the revised definition of 'life support system' for prescribed customers? If not, what further amendments do you propose?

ESCOSA's PMSC effectively prohibits those customers who require life-support services from utilizing prepayment, for the obvious reason that prepayment risks frequent de-energisation of the home. Implementing mandatory prepayment has the effect of excluding *prescribed customers* from this general prohibition.

Should mandatory prepayment be implemented the only practical and humane response is to disable the self-disconnection functionality of prepayment metering for identified life-support customers, as provided by Schedule 2, clause 1.10.1.

We support ESCOSA's decision to include nebulisers in the revised definition. Further, we support and commend ESCOSA's recognition of medically required heating and cooling functionality in the home as critically important for many identified life support customers and suggest this offers an important precedent for other jurisdictions.

Consistent with our previous submission, we urge ESCOSA to bring other life support systems recognised in the NERR within the scope of the revised definition. This means including Crigler Najjar syndrome phototherapy equipment and any other equipment that a registered medical practitioner certifies is required for a person residing at the customer's premises for life support.

We note (in discussion with health providers) that under proposed arrangements there will likely be additional burdens placed on medical practitioners in community-controlled health organisations to certify life support needs. The process for certification should be developed by ESCOSA in consultation with those organisations to meet the needs of medical practitioners and communities. A possible approach is to use a standard medical confirmation form as used by Jacana Energy in the Northern Territory.

The form is available at: <https://www.jacanaenergy.com.au/sites/default/files/2022-02/Medical%20Confirmation%20Form.pdf>

Reporting and monitoring will be important, including on the numbers of identified, eligible (and actual) life-support customers realizing the benefits of proposed protections, which we reiterate are not currently included within ESCOSA's proposed reporting metrics and must be available to affected communities, their service organisations who will inevitably be implicated in the task of mitigating household energy insecurity and advocates.

3. Conclusion

Despite the considerable lengths ESCOSA and stakeholders have gone to and which we commend, we submit that use of prepayment metering should be based on the voluntary

and informed decision of the customer, rather than mandated. Free, prior, and informed consent requires that customers be well-informed (including in their own languages) of the risks of prepayment, including those reasonably anticipated or expected rates of disconnection upon non-payment.

We support SACOSS' call to delay implementation and for further deliberation by the new State Government in consultation with affected communities.

Furthermore, we note as a more general observation that the introduction of new payment systems in affected communities must be linked with consideration of the role that solar photovoltaic (PV) systems installed in public housing (including those using mandatory prepayment metering) could play in creating sustainable energy systems. We observe that in South Australia:

- The connection of customer solar PV systems in RAES micro-grid locations cannot occur without prior written approval from DEM.

Further;

- RAES customers may submit a proposal regarding solar PV connection, however connection will not be considered *'unless the customer can demonstrate that the proposal will not impact on the stability of the existing grid or the security of electricity supply to all customers'* [21].

As in other jurisdictions, Aboriginal community and public housing residents typically have very few options to make energy efficiency changes to housing without having to navigate complex regulatory barriers. Rooftop solar is currently almost wholly absent from public housing in the affected communities and we note that there is currently no solar feed-in nor zero-export tariff structured for off-grid households utilizing prepayment in South Australia outside of the conditions stipulated above—including for those customers soon to commence mandatory prepayment metering. These factors serve to 'lock-out' these customers from realizing the significant local benefits of rooftop solar PV.

We wish to highlight this situation, as faced by mandatory prepayment customers in affected communities, is occurring within a broader context where renewable energy

generation in South Australia commonly supplies 100% of grid-based energy demand, many times each week and during the year, and where residential rooftop solar uptake is driving down household energy costs for many consumers.

Removing regulatory and technical barriers to rooftop solar for community and public housing in the affected communities is likely beneficial in supporting those households experiencing payment difficulties, and in reducing the frequency and duration of foreseeable involuntary self-disconnection events.

We thank you for considering our submissions to this policy issue. We would be pleased to discuss any questions ESCOSA has in relation to the matters covered.

References

1. Riley, B., et al. *Submission in response to the Consultation on proposed amendments to customer payment under the South Australian Remote Area Energy Supply (RAES) Scheme (Issues Paper July 2021)*. 2021; Available from: https://www.energymining.sa.gov.au/_data/assets/pdf_file/0006/676599/Australian_National_University_ANU_-_RAES_Submission.pdf.
2. Riley, B., et al. *Submission in response to Consultation paper: Off-grid energy consumer protection framework review and Prepayment Meter System Code review—Update paper*. 2022; Available from: <https://www.escosa.sa.gov.au/ArticleDocuments/21842/20220330-Energy-OGCEP-ConsultationPaperSubmission-ANU.pdf.aspx?Embed=Y>.
3. Australian Government. *National Agreement on Closing the Gap*. 2020; Available from: <https://www.closingthegap.gov.au/national-agreement/targets>.
4. DPC, *South Australia's Implementation Plan for the National Agreement on Closing the Gap*, Department of Premier and Cabinet, Editor. 2021, SA Government: Adelaide, South Australia.
5. Longden, T., et al., *Energy insecurity during temperature extremes in remote Australia*. Nature Energy, 2021.
6. SACOSS. *Submission to the Legislative Review Committee on the Electricity (General) (Payment Condition) Variation Regulations 2021*. 2022; Available from: <https://www.sacoss.org.au/submission-legislative-review-committee-electricity-general-payment-condition-variation-regulations>.

7. DEM, *Consultation on proposed amendments to customer payment under the Remote Area Energy Supply (RAES) Scheme*, DEM, Editor. 2021, Government of South Australia: Adelaide, South Australia.
8. SA Government, *Your Say: Proposed Amendments to Customer Payment System Electricity (General) Regulations 2012*. 2021.
9. Longden, T., et al., *Heat-related mortality: an urgent need to recognise and record*. The Lancet. Planetary health, 2020. **4**(5): p. e171-e171.
10. Purple House, et al., *Re: Call for Moratorium on Electricity Disconnections in Indigenous communities during NT COVID-19 Response*. 2022.
11. *Essential Services Commission Act (SA) 2002*.
12. ABS, *Census uncovers Australia's most advantaged and disadvantaged areas*. 2018, Australia Bureau of Statistics: Canberra.
13. ESCOSA. *Prepayment Meter System Code*. 2013; Available from: https://www.escosa.sa.gov.au/ArticleDocuments/575/130905-PrepaymentMeterSystemCode_PMSC02.pdf.aspx?Embed=Y.
14. ESCOSA, *Cowell Electric Supply Pty Ltd licence amendment: Proposed prepayment by default consumer protections. Draft decision, May 2022*. 2022, ESCOSA: Adelaide, South Australia.
15. ABS. *Anangu Pitjantjatjara 2016 Census Aboriginal and/or Torres Strait Islander people QuickStats*. 2016; Available from: <https://www.abs.gov.au/census/find-census-data/quickstats/2016/IARE402001>.
16. ABS. *Maralinga Tjarutja 2016 Census Aboriginal and/or Torres Strait Islander people QuickStats*. 2016; Available from: <https://www.abs.gov.au/census/find-census-data/quickstats/2016/ILOC40300202>.
17. ABS. *Yalata 2016 Census Aboriginal and/or Torres Strait Islander people QuickStats*. 2022; Available from: <https://www.abs.gov.au/census/find-census-data/quickstats/2016/ILOC40300204>.
18. DEM. *Proposed amendments to customer payment under the RAES Scheme – Response to Stakeholder comments on Issues Paper*. 2021; Available from: https://www.energymining.sa.gov.au/_data/assets/pdf_file/0011/676604/RAES_Pr_epayment_Issues_Paper_-_Submissions_Summary_Table.pdf.
19. Cowell Electric and Government of South Australia. *Revised Electricity Tariffs to apply from 15 November 2021*. 2021; Available from: <https://www.energymining.sa.gov.au/consumers/energy-grid-and-supply/remote-area-energy-supply/files/RAES-tariffs,-charges-and-public-lighting-fees.pdf>.

20. COAG. *Partnership Agreement on Closing the Gap 2019-2029*. 2019; Available from: https://www.coag.gov.au/sites/default/files/agreements/partnership-agreement-closingthegap_2.pdf.
21. DEM. *Remote Area Energy Supply (RAES) Connecting customer owned solar PV systems*. 2022; Available from: https://www.energymining.sa.gov.au/_data/assets/pdf_file/0008/670391/13-Fact Sheet-Connecting customer owned PV to RAES grid.pdf.