

Australian Rehabilitation and Assistive Technology Association (ARATA) Submission

The National Energy Retail Amendment

(Improving life support processes) Rule

2025

04 September 2025

For further information, please contact [REDACTED] or

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ARATA would like to acknowledge and thank the ARATA members who contributed their knowledge and expertise to inform this submission, in particular, we thank ARATA Board Member Allan Hunter for his exceptional contribution and leadership.

1. Introduction and Executive Summary

Australian Rehabilitation and Assistive Technology Association (**ARATA**) welcomes the opportunity to respond to the comment on the proposed changes to the life-support notification rule in the NERR and AER Life support registration guide. In particular, we acknowledge the outstanding research and background material provided by SA Power Networks, the Energy Charter and Life-Support Medical Advisory Group (**LMAG**) and a long list of contributors over the last 2 years.

ARATA is the national non- profit peak body representing a range of assistive technology (**AT**) stakeholders including users, providers, researchers, and educators. ARATA promotes, develops, and supports the national rehabilitation and assistive technology community of practice as well as contributing as a founding organisation to the Global Alliance of Assistive Technology Organizations (**GAATO**), and a member of the Coalition on Rehabilitation Engineering & Assistive Technology in Asia (**CREATE Asia**). ARATA also works with other AT stakeholder organisations including National Assistive Technology Alliance (**NATA**) and Assistive Technology Suppliers Australia (**ATSA**). For further information, see <https://www.arata.org.au/>.

ARATA has completed the stakeholder feedback template, and this is attached. This submission discusses an additional 4 key areas over and above the template questions that ARATA would like to address:

1. **Definitions** - ARATA has some concerns regarding the proposed approach - starting with the creation of 2 different categories¹ of "Life-Support Equipment": "Critical" and "Assistive". ARATA recommends a review of underlying assumptions, as well as research to identify Medical Equipment (**ME**) and AT in use by a wide range of participants and the wider community before compiling a list for the proposed "Medical Confirmation Form for Life-Support Equipment".
2. **Increased scope** - extending the scope of the "Life-Support Registration" rule to include the² "41% who use life-support equipment to make their life more comfortable" means the rule change needs to take into account a diverse range of non-life-support ME and AT, along with acknowledging the role played by allied

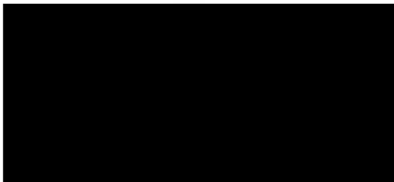
¹ **Rule Change Request — #BetterTogether – Better Protections for Life Support Customers** dated 23 August 2024 filename: "Support Customer Rule Change Request 23 August 2024.pdf" on page 14 of 43

² **Rule Change Request — #BetterTogether – Better Protections for Life Support Customers** dated 23 August 2024 filename: "Support Customer Rule Change Request 23 August 2024.pdf" on page 21 of 43

health professionals (**AHP**) including occupational therapists (**OT**) acting in a professional capacity.

3. **Emerging technologies** - . It's an oversight to run a "*National Life Support information and Awareness Campaign targeting life-support user, their care team and the medical profession*" in the absence of a comprehensive review of backup power solutions available – now, and in the near future. If only 7% have access to backup power then offering vague guidance such as³ "*Consider alternative power options (e.g. larger generator, solar)*" is clearly inadequate. Need to have in place information and an appropriately trained advisor familiar with a variety of solutions including solar PV panels and solar batteries, inverter/charges, portable "power stations" and EV's for both new build and retrofit scenarios.
4. **Associated issues** - An early 2025 ARATA scoping study for a research proposal, identified a range of issues associated with backup power supplies for people who use ME and AT in the home residential and assisted-living environments.

If any further information or clarification is required, please don't hesitate to contact ARATA.



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³ **Draft Power Outage Plan for Life-Support in the Home: saying safe in the power goes out.:** life-support.poweroutage.plan.com.au retrieved 17 August 2025

2. Recommendations

Recommendation 1 – Life-Support Equipment Definitions

"Critical" and "Assistive" life-support definitions to be replaced with "life-support" and "essential" Medical Equipment (ME). Assistive technology such as lifters and electric wheelchair charging equipment should be identified as assistive technology (AT) in line with industry practice.

Recommendation 2 – Responsible Medical Authority Update

Current provision for "Responsible Medical Authority" should be retained. Any lists of life-support or essential equipment should be considered examples or indicative, with provision made for professional judgement. However, provision should also include allied health professionals as responsible professionals (with appropriate caveats if required), where appropriate.

Recommendation 3 – Duty of Care

Stakeholders should explicitly address conflicting requirements and advocate for formal acknowledgement at both state and territory, and federal levels, of responsibility for backup power supplies in a life-support situation.

Recommendation 4 – "Emergency Medical Essential Power in Your Area"

The AER should consult with relevant state and territory authorities to clarify what alternatives are available for emergency power supply in the event of evacuation required (or WALDO) for anyone dependent on Life-Support Equipment, prior to the proposed education campaign.

Recommendation 5 – WALDO Requirements

Backup power supply recommendations should acknowledge the need for longer duration backup power, taking into account modern renewable energy and DER/CER developments to improve housing resilience required by climate change.

Recommendation 6 – Resilient Housing & Innovative Solutions

AEMO should assess the full range of innovative solutions available for backup power and consult organisations such as the Clean Energy Council, Smart Energy Council, and user groups such as ARATA before developing a template.

Recommendation 7 – Review Technical Standards

A review and update of both AS/NZS 3000:2018 Appendix M and AS IEC 6060.1.11:2017 should be conducted to ensure education campaign content and backup power supply advice is consistent with applicable technical standards.

3. Definitions

ARATA believes that the definitions in the new rule be reconsidered. Having two types of "life-support equipment" - "Assistive" and "Critical" doesn't make sense. The following sentence illustrates the potential for confusion.⁴

"The use of Life Support Equipment ranges from life enhancing equipment (Assistive Life Support Equipment) to the more critical needs customers using life-sustaining equipment (Critical Life Support Equipment)."

ARATA recommends that definitions along the lines of the following broad functional definitions be used:

1. **Life-Support equipment**- any ME and AT where the loss of power will result in the person dying in a matter of minutes or a few hours. An example is the use of a ventilator by a high-level quadriplegic dependent on assisted ventilation to breathe.
2. **Essential equipment** - ME and AT where there is a degree of tolerance by the user for power outage, but severe injury or permanent damage may occur if the situation is not rectified in minutes or hours. Examples include CPAP machines and pressure relief mattresses.

Note that the above 2 definitions are covered by the Proposed rule change. However, any discussion of backup power in disability housing needs to acknowledge a broader category - Important Equipment. This is included for information only:

3. **Important equipment** - ME and AT where the user would be inconvenienced or unreasonably restricted if the power goes out. Examples include electric bed, Internet connection and networking equipment, AT such as garage door opener, and environmental controls. A degree of flexibility is required for a range of scenarios and use cases. In some cases an electric bed can be a critical life support, where a person at high risk of aspiration could die lying flat in less than 1 to 3 hours without supervision or in-person assistance. This is why it is important the Medical Confirmation Form for Life Support Equipment includes the 'other medical equipment' category, and that this form can be completed by a GP, not required to be completed by a specialist medical practitioner.

Recommendation - Life-Support equipment definitions. "Critical " and "Assistive" life-support definitions to be replaced with "life-support" and "essential" Medical Equipment (ME).

⁴ **Rule Change Request — #BetterTogether – Better Protections for Life Support Customers** dated 23 August 2024 filename: "Support Customer Rule Change Request 23 August 2024.pdf" on page 4

And assistive technology such as lifters and electric wheelchair charging equipment be identified as assistive technology (AT) in line with industry practice.

Extending the scope of the "Life-Support Registration" rule to include the⁵ "41% who use life-support equipment to make their life more comfortable" means the rule change covers a range of non-life-support ME and AT, along with a wider range of allied health professionals (AHP) including occupational therapists (OT) acting in a professional capacity.

Examples include CPAP machines and pressure relief air mattresses, ceiling hoists, and electric wheelchairs. Revised wording needs to involve more than just a "Registered Medical Practitioner in developing a backup plan".

Recommendation - Life-Support equipment definitions. Assistive technology such as lifters and electric wheelchair charging equipment be identified as assistive technology (AT) in line with existing industry practice.

Recommendation - Responsible Medical Authority update. Current provision for "Responsible Medical Authority" be retained . Any lists of life-support or essential equipment to be considered examples or indicative - and provision made for professional judgement. However provision to include as responsible professionals (with appropriate caveats if required) allied health professionals where appropriate.

4. Backup Power

ARATA welcomes the intention of widespread education campaign addressing backup power supplies. But there are some associated issues which need to be adequately researched and agreed amongst stakeholders. This section of the ARATA submission addresses those concerns.

4.1 Who is responsible?

Prior to the NDIS , responsibility for looking after the health of people with disabilities - was largely the responsibility of State and Territory Health ministers .

With the introduction of the NDIS, has responsibility been passed to the Commonwealth government to provide for backup power supplies?

⁵ **Rule Change Request — #BetterTogether – Better Protections for Life Support Customers** dated 23 August 2024 filename: "Support Customer Rule Change Request 23 August 2024.pdf" on page 21 of 43

A newspaper report covered the death of a man *"believed to have been suffering from muscular dystrophy" in December 2015 at Wayville*⁶:

"the man's breathing machine shut off between 2.09am and 4.48am after balloons and streamers tangled in power lines caused an 11,000 volt line to short, blacking out about 500 homes near the Showgrounds."

There are conflicting reports about the deaths of two men with muscular dystrophy, Conor Murphy and Kyle Scolari, in Perth in 2014. The immediate cause was a power outage due to *"tornado downed power lines"*.

One report stated that *"the machine doesn't have a backup supply" and the failure of "life preserving electronic breathing equipment" could not be addressed because*⁷ *"Their beeper turned off and unfortunately, they couldn't rouse the carer"*.

According to another account ⁸ *"It has been reported that a backup generator at the men's home failed"*. If this is the case, then one possible cause is that the changeover switch failed to operate when the mains power failed.

All three fatalities may have been preventable. It's now 2025 - who is responsible for providing backup power?

This uncertainty is best illustrated by the NDIS. There are more than 1,200 High Physical Support (HPS) Specialist Disability Accommodation (SDA) registered properties⁹ with one or more uninterruptible power supply (**UPS**) to provide backup power - it's a mandatory requirement in the 2019 SDA Design Standard¹⁰.

This is contradicted by the 2024 NDIS legislation Section S10 Support resources¹¹ which states that¹²

⁶ <https://indaily.com.au/news/2015/12/16/inquiry-call-as-sa-man-on-life-support-dies-during-power-outage/>

⁷ <https://www.perthnow.com.au/news/wa/beaconsfield-housemates-and-muscular-dystrophy-sufferers-conor-murphy-and-kyle-scolari-die-after-storm-cuts-power-to-vital-medical-equipment-ng-757bf5048401ae0d63115258f4f1e571>

⁸ <https://www.abc.net.au/news/2014-07-15/brother-pays-tribute-to-man-who-died-in-perth-storm-after-power/5597012>

⁹ National Disability Insurance Agency Quarterly Report Q1 2024 -25, page 72

¹⁰ <https://www.ndis.gov.au/providers/housing-and-living-supports-and-services/specialist-disability-accommodation/sda-design-standard> PDF retrieved 03 September 2025

¹¹ <https://engage.dss.gov.au/ndis-supports-rule/ndis-supports-rules-resources/> retrieved 26 July 2025

¹² NDIS document **"Supports that are not "NDIS supports"** undated, unsigned from <https://ourguidelines.ndis.gov.au/would-we-fund-it/what-does-ndis-fund> retrieved 26 July 2025

*“services, items, and equipment that can't be funded by the NDIS...
[Includes] ... (h) electricity generators, solar panels, home batteries for power storage, ...”*

NDIA clearly has a duty of care for a cohort of severely disabled NDIS participants hence the mandatory requirement for backup power supplies in high physical support (**HPS**) SDA. Given the legislation now rules out NDIA funding backup power supplies (via generator or batteries), responsibility needs to be clarified.

Recommendation - Duty of care. Stakeholders to explicitly address conflicting requirements and advocate for formal acknowledgement at both state and territory, and federal levels, responsibility for backup power supplies in a life-support situation .

4.2 Backup duration

Not included in the proposed consumer information such as the “My Power Outage Checklist” is suggested target or recommended backup durations for various use cases.

ARATA's experience when dealing with backup power supply for clients is that the most frequently asked questions are “how long backup time do I need” and “how much is it going to cost”.

It's unreasonable to expect a diverse range of users, possibly dealing with an accident or medical event and having a range of critical decisions to make, to make informed judgements. The proposed education campaign will have to provide some guidelines.

As a starting point, consider that power outages are typically¹³ :

“less than 12 hours in duration and typically relate to power damage caused by lightning, car accidents, and delivery such as falling branches, and animals”.

This is broadly consistent with the¹⁴ “average minutes off supply experienced by a customer” (raw) ranging from just under 2 hours to 17 hours depending on Distribution Network Service Provider (**DNSP**) and year.

Research and resources need to be funded to provide both peer advice and technical guidance on availability and cost of various options.

¹³ Values of customer reliability. Final report on VCR values, December 2024, Australian Energy Regulator

¹⁴ Ibid on page 10 of 43

4.3 Evacuation Destination

There is a similar problem regarding responsibility for the often repeated advice “move to a suitable site ” in the event of an evacuation requirement. The proposed checklist has a vague “think about evacuation including transportation” in the event of power going out as shown in Figure 1.

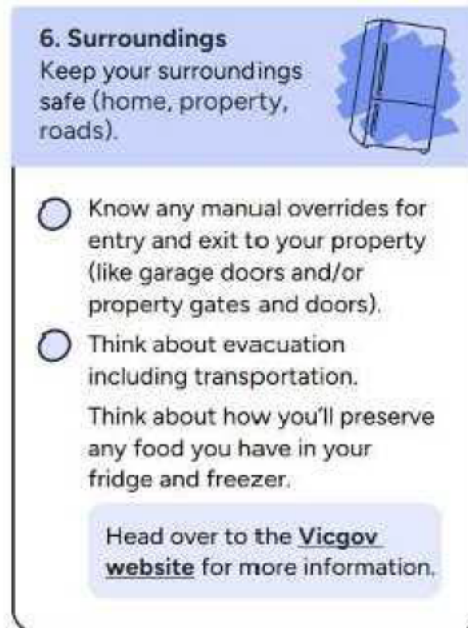


Figure 1 - From proposed Power Outage Plan for Life Support in the Home checklist

Similarly, advice provided by the NDIS¹⁵ :

It's also a good idea to make sure any medical equipment back-up batteries are always fully charged and you have a list of emergency numbers. Like your GP, local hospital or someone nearby to assist you if the power goes out.

For more information about emergency medical essential power in your area, please go to your state or territory government website:

¹⁵ <https://ourguidelines.ndis.gov.au/would-we-fund-it/assistive-technologies/generators> retrieved 26 July 2025

followed by¹⁶:

For more information about emergency medical essential power in your area, please go to your state or territory government website:

- [Life support equipment – be prepared and make a plan](#)
- [Customers using life support equipment](#).

Checking with state government authorities and power authorities confirms that neither link contains useful information.

ARATA can't find any evidence of a state or federal health Department or Minister that has contingency plans in place to make possible "*medical evacuation to a suitable site which is able to provide a long-term alternative power supply*". In the event of a natural disaster or long-term power outage, designing in provision for, or easy connection of, PV, solar batteries, and EV's may be the most practical long-term option. In some situations though, it may be a generator which is automatically activated by the loss of grid power.

Recommendation - "emergency medical essential power in your area". AER to consult with relevant state and territory authorities to clarify what alternatives are available for emergency power supply in the event of evacuation required (or WALDO) for anyone dependent on Life-Support Equipment PRIOR to proposed education campaign.

4.4 WALDO - Wide and Long Duration (Power) Outage

Most recently, more, than [300,000 properties were without power over the weekend](#) starting Saturday 8 March 2025 due to Cyclone Alfred. Monday morning 10 March 2025, almost 220,000 "[remain without power across South East Queensland and northern New South Wales](#)". Four days later on Tuesday, 11 March 2025, more than [120,000 properties were still without power](#).

Six days later, Thursday, 13 March 2025, there were still more than [33,000 properties without power](#).

Extreme weather events now need to be planned for . More examples:

1. On Saturday the 14th of November 2022, around 163,000 customers here in Adelaide were without power due to a violent storm. At 4 PM on the following day, more than

¹⁶ ibid

65,000 customers were still without power. Some suburbs were still not reconnected to mains power the following Tuesday¹⁷.

2. Floods and bushfires over the last few years in Lismore and Murrumbidgee respectively over the last few years, illustrate the increasing impact of climate change¹⁸.
3. On Wednesday, 2 July 2025, a powerful coastal low-pressure system referred to as a "bomb cyclone" resulted in more than 40,000 customers being without power in New South Wales¹⁹

The discussion paper makes it clear that climate change will be making these weather events even more extreme.

Recommendation - WALDO requirements backup power supply recommendations to acknowledge need for longer duration backup power in taking into account modern renewable energy and DER/CER developments to improve housing resilience required by climate change.

5. Resilient housing & innovative solutions

Since 1 July 2025, the Commonwealth and some State and Territory governments are offering rebates to encourage use of solar batteries.

"[Solar Batteries] can offer both financial and nonfinancial benefits. For example:

- *saving money by reducing the amount of energy that needs to be purchased at times when energy is not being generated onsite*
- *less dependence on grid energy and more control over energy use*
- *providing back-up power when grid blackouts occur (if set up to do so)*
- *better environmental outcomes for the overall energy system (for example, by reducing the amount of energy purchased from the grid that may come from non-renewable sources).²⁰*

More than 30% of Australian households now have rooftop solar PV²¹.

¹⁷ <https://www.adelaidenow.com.au/news/south-australia/thunderstorm-refuses-to-break-no-rain-relief-in-sight/news-story/0da5a2123ccb4b1ff818b35f6a4a17fb>

¹⁸ <https://iced.s.anu.edu.au/research/research-stories/defending-australia-disasters>

¹⁹ <https://wattclarity.com.au/articles/2025/07/more-than-40000-customers-without-power-in-nsw-after-wild-weather-overnight-on-wednesday-2nd-july-2025/>

²⁰ <https://www.yourhome.gov.au/energy/batteries>

²¹ <https://arena.gov.au/renewable-energy/solar/>

Using solar panels and “solar” batteries for power backup as well as to save money on energy bills, is well-established in mainstream housing - and capable of more than just keeping the lights on.

For example, in 2019 the federal Social Services Minister Paul Fletcher endorsed a project where^{22,23}:

“Disability housing service, Inhousing, in partnership with Natural Solar, will install a solar panel system and battery to store energy, into homes in a Specialist Disability Accommodation (SDA) development in South Australia.”

And there is no requirement to use solar batteries with solar PV panels. It’s certainly not DIY and it’s essential to seek the advice of a SAA accredited expert²⁴.

There is a widespread mistaken belief that backup power solutions in a residential assisted living environment require an expensive special-purpose UPS capable of providing high quality 50 Hz 230 VAC to meet the needs of delicate medical equipment a.k.a. “*NDIS approved, medical grade UPS*”.

In just about all cases, the “medical equipment” will be compliant with requirements imposed by the Therapeutic Goods Administration (TGA) and be certified to work when plugged into a standard domestic GPO as per AS IEC 6060.1.11: 2017 *Medical electrical equipment, Part 1.11: General requirements for basic safety and essential performance - Collateral Standard: Requirements for medical electrical equipment and medical electrical systems used in the home healthcare environment*.

In layman’s terms, backup power supply only needs to satisfy AS IEC 6060.1.11: 2017 and be capable of a nominal 230 V AC +10%/-20% - a much cheaper and widely available solution.

But there are a variety of emerging technologies that could be used to improve the resilience of housing in an emergency situation for the loss of power.

Solar batteries, portable “power stations”, community batteries, microgrids and Electric Vehicles (**EV’s**) all need to be considered as possibilities in a variety of different situations and contexts.

Extensive research and testing needs to be conducted prior to any education campaign regarding backup power supply planning.

²² Ken Fullerton, **How solar + storage can be a game-changer for people with disabilities** republished February 19, 2020 and available <https://onestepoffthegrid.com.au/how-solar-and-storage-could-be-a-game-changer-for-people-with-disabilities/>

²³ <https://probonoaustralia.com.au/news/2019/05/solar-batteries-to-light-up-disability-housing/>

²⁴ <https://www.solarquotes.com.au/101-guides/buying-batteries/>



**Figure 2 - 12.5 kW DC bidirectional (V2G) EV charger and 16kWh battery
Not shown BYD Atto 3 EV with 50KWh battery²⁵**

Recommendation - Resilient Housing & Innovative Solutions . AEMO to assess the full range of innovative solutions available for backup power and consult organisations such as the Clean Energy Council , Smart Energy Council, and user groups such as ARATA before developing the template.

6. Applicable Standards

A starting point to consider is AS/NZS 3000:2018 Electrical installations. It's a mandatory requirement called up in State legislation (Appendix A). Unfortunately, Appendix M, first introduced in the 2018 addition, is already out of date. ARATA has submitted an update proposal to Standards Australia, and that is available [here](#).

What is required in an updated AS/NZS 3000:2018 Appendix M is a sufficiently developed framework for electricians and designers when designing and installing a backup power supply to include appropriate consideration including consultation with appropriate allied health professionals. Key decisions regarding capability and backup duration needs to be documented and implications clearly explained and understood by stakeholders.

²⁵ <https://thedriven.io/2025/08/07/load-shifting-just-got-real-how-v2g-has-changed-my-electric-world/> retrieved 17 August 2025

There is also a need to design either part or whole of house backup power solutions in a power grid increasingly designed to work with Distributed Energy Resources (DERs) and Consumer Energy Resources (CRs) such as PV, solar battery, and EV's.

OC standard AS IEC 6060.1.11: 2017: (Full title: *Medical electrical equipment, Part 1.11: General requirements for basic safety and essential performance - Collateral Standard: Requirements for medical electrical equipment and medical electrical systems used in the home healthcare environment*) (emphasis added) applies.

Recommendation - Review Technical Standards. A review and update of both AS/NZS 3000:2018 Appendix M and AS IEC 6060.1.11: 2017 be conducted to ensure education campaign content and backup power supply advice is consistent with applicable technical standards.