

23 June 2023

Energy Policy WA
Level 1, 66 St Georges Terrace
Perth WA 6000

By e-mail: EPWA-Submissions@dmirs.wa.gov.au

Dear Sir or Madam,

DRAFT VOLUNTARY EMBEDDED NETWORKS CODE OF PRACTICE

Empowered welcomes this opportunity to provide feedback on the *Draft Voluntary Embedded Networks Code of Practice* (the **Code**). Terms not defined in this submission have the same meaning defined in the Code.

About Empowered

Empowered has been formed as a dedicated renewable energy business by Hesperia to help it deliver on its goal to transition to 100% renewable energy. Empowered is developing services and projects that help Western Australia through the energy transition, aiming to make 100% renewable energy achievable for all. Empowered's team comprises energy specialists with extensive expertise in renewable energy project development, electricity retailing, and energy advisory.

Empowered is a wholly-owned subsidiary of Hesperia.

About Hesperia

Hesperia is a leading property developer in Western Australia, undertaking high-quality, innovative projects that deliver significant impact to our community. Operating across a diverse range of disciplines within the property and sustainability sectors, Hesperia is focused on precinct-level projects that are large, complex and city-changing in their aspiration.

Hesperia recognises the importance of environmental sustainability for our community, and is committed to leading the way through the delivery of best practice and exceptional sustainability outcomes across all its projects. Hesperia is the state's first property developer to achieve B Corporation certification, which means that it meets the highest verified levels of social and environmental performance, public transparency and accountability to balance profit and purpose.

Empowered - Delivering 100% Renewable Electricity Embedded Networks

Empowered will act as renewable electricity Embedded Network Seller in Hesperia's developments where there are multiple tenants or lot owners behind a single 'master meter'.

Empowered will supply 100% renewable electricity to all users and common areas by maximising on-site renewable generation to the greatest extent feasible while importing the balance of electricity requirements as 100% GreenPower or electricity fully matched with Large-Scale Generation Certificates (**LGCs**) from the Grid.

Empowered launched its first renewable electricity embedded network at Hesperia's Victoria House development in June 2023, supplying 100% renewable electricity to residents and commercial tenants.

Feedback on the *Draft Voluntary Embedded Network Code of Practice*

Empowered commends the efforts of Energy Policy WA in preparing the Code, accompanying consultation paper and other supporting materials.

Empowered recognises that the Code aims to elevate the standard of service and customer protections obliged to be provided to small use customers (less than 160 MWh per annum consumption) ‘behind the meter’ in embedded networks to be in line with ‘on-market’ small use customers that have direct access to the Grid. Empowered is fully supportive of this intent.

Empowered recognises that the Code also intends to provide a way forward for fairer pricing for small businesses in embedded networks and restrain the potential for excess profiteering by Embedded Network Sellers. Empowered is supportive of this intent, though we have feedback to share on the Default Flat Rate Tariff proposed.

Given the above in totality, our view is that the presence of this Code may help alleviate concerns that tenants and lot owners may have when moving into a tenancy or lot that is part of an embedded network.

Empowered is well-placed to adopt the Code once finalised. However, Empowered provides the following feedback on certain focus areas for Energy Policy WA’s consideration.

1. Underlying Electricity Costs Escalating Faster Than Benchmark Default Flat Rate Tariffs

Energy Policy WA proposes that the residential A1 and non-contestable small business L1 tariffs are the Default Flat Rate Tariffs in embedded networks for residential and non-residential customers respectively. We note that these tariffs are set by the WA Government.

There is a disconnect in the expected rate of escalation between these tariffs and the potential future underlying costs of grid-supplied electricity. Therefore, there is a risk that economics of an embedded network can be eroded if the underlying costs increase faster than the tariffs. This is particularly prevalent in embedded networks supplying 100% renewable energy, where the margins are lower due to the cost of surrendering more than the mandatory amount of renewable energy certificates (as discussed later in this submission).

We observe that the A1 and L1 tariffs will escalate by 2.50% from 1 July 2024 and are forecast to escalate by 2.50% per annum each year through to financial year 2026-27:

Table 1: Expected Future Escalation in Proposed Default Flat Rate Tariffs

Non-Contestable Tariffs	Approved Escalation Effective 1 July 2023	Budget Planning Assumptions from 2024-25 to 2026-27
Residential A1	2.50% p.a.	2.50% p.a. each year through to financial year 2026-27
Small Business L1	2.50% p.a.	2.50% p.a. each year through to financial year 2026-27

Source: [Western Australia State Budget 2023-24: Budget Paper No. 3, Economic and Fiscal Outlook, Table 8.8](#)

In contrast, the cost components cost of grid-supplied electricity which represents a very high proportion of the Synergy L1 tariff have escalated by approximately 15% p.a. over the past 12 months. We believe that there is considerable risk that these components will escalate faster than 2.50% p.a.

Table 2: Escalation of Key Cost Components of Grid-Supplied Electricity

Cost Component	Approximate % of Synergy L1 tariff	Escalation over past 12 months	Future Escalation Commentary
Wholesale Electricity ¹	28%	28% p.a.	We think it is more likely than not that prices may increase faster than 2.50% in the short to medium term, given the announced closures of coal-fired generation and upwards pressure on WA gas pricing due to forecast gas supply-demand shortfalls ⁶ .
Western Power Network Charges ²	33 – 41%	12 – 14% p.a.	It is forecast that prices will escalate between 2.9% p.a. and 8.8% p.a. each year out to 1 July 2027 ² .
AEMO Reserve Capacity Charges ³	5 – 15%	3% p.a.	We believe there is upwards pressure on Reserve Capacity Prices based on forecast reserve capacity shortfalls from 2025-26 through 2031-32 ⁷ .
Mandatory Renewable Energy Certificate Surrender: Large Scale Generation Certificates ⁴	4%	21% p.a.	Spot Large Scale Generation Certificate pricing has been volatile, ranging from \$39 per LGC to \$70 per LGC over the past 12 months. We believe corporate and industrial decarbonisation and renewable energy consumption targets will place upward pressure on the price of LGCs. ⁵
AEMO WEM Fees ⁵	1%	32% p.a.	
Total % of Synergy L1 tariff / Average Escalation	79 – 98%	15% p.a.	

Source: Empowered analysis. Excludes cost components related to the mandatory surrender of Small Scale Technology Certificates (STCs), ancillary services / essential system services charges and WEM regulatory fees levied by AEMO.

- Notes:
1. Based on the price of a 'flat' block of energy during calendar year 2024 offered for sale by Synergy Wholesale on 1 June 2022 of \$57.79/MWh, compared with a price on 1 June 2023 of \$73.19/MWh as per <https://wholesale.synergy.net.au>. Prices are at the Muja reference node and exclude loss factors. This wholesale product price is presented as a representative benchmark of the increase in energy costs in the Wholesale Electricity Market over the past 12 months.
 2. This is based on the rate of price increase in existing reference services for business customer connection points that are typically the lowest cost reference services, as approved by the [Economic Regulator Authority in the 2023-24 price list for the Western Power Network \(Table 1.4\)](#) and the [Economic Regulator Authority approved Western Power Access Arrangement, Appendix F.1 – Reference Tariff Change Forecast \(Section 1.1\)](#)
 3. This represents the increase in the Reserve Capacity Price from 1 October 2023, based on a weighted average of a 24% increase in the Reserve Capacity Price for non-Transitional Facilities and a 2.8% increase in the Reserve Capacity Price for Transitional Facilities over the capacity year 1 October 2022 to 1 October 2023, as determined by the [Australian Energy Market Operator](#).
 4. This is based on the spot price of LGCs in June 2022 of approximately \$48.15/LGC increasing to \$57.50/LGC in June 2023, as published by [Demand Manager](#), a broker of renewable energy certificates. Spot LGC prices are indicative of LGC prices levied by retailers on Embedded Network Sellers. This increase in LGC prices is amplified through to electricity costs by an increase in the Renewable Power Percentage from 18.64% in 2022 to 18.96% in 2023 for mandatory LGC surrender, as per the [Clean Energy Regulator](#). Price ranges over the past 12 months sourced from Demand Manager.
 5. Based on [AEMO's Draft FY24 Budget and Fees, Table 31](#).
 6. Based on [AEMO's Gas Statement of Opportunities 2022, Table 3](#).
 7. Based on [AEMO's Electricity Statement of Opportunities 2022, Table 18](#).

Given the above, there is risk that the economics of these embedded networks are such that margins will be eroded to a level where these renewable energy embedded networks are not viable, which is counter to encouraging the uptake of renewable energy. This risk will arise where:

- only a relatively small proportion of renewable electricity can be generated on-site and absorbed by the site's load (for example in a multi-storey building with limited rooftop space); and
- therefore, there is a high proportion of grid-supplied electricity on-sold to tenants with an additional cost premium related to 100% GreenPower or voluntary surrender of LGCs.

We also make the following observations in relation to the Synergy L1 tariff:

- Unlike certain other tariffs, the 2023-24 State Budget does not acknowledge that the L1 tariff 'approximates cost-reflective levels', while certain other tariffs are noted as 'approximating cost-reflective levels' (notably the contestable tariffs L3, R3)¹. We do not consider that non-cost reflective tariffs should be imposed on the private sector.
- On-market business customers may only access the Synergy L1 tariff if they consume less than 50 MWh per annum. However, Energy Policy WA now proposes to make this tariff also accessible to embedded network customers consuming 50 to 160 MWh per annum, which is not aligned with the on-market position.

Proposed Amendment

It is proposed that the Default Flat Rate Tariff for small use non-residential customers is instead set with regard to the following key principles:

- A baseline price that is cost-reflective of grid-supplied electricity for the vast majority (e.g. 90%) of on-market small use business customers
- The baseline price moves every 1 July relative to the average expected movements in the underlying cost components of grid-supplied electricity over the forthcoming year

We acknowledge that there is more detail that would need to be considered to implement these principles, but we do not believe that this is an overly complicated exercise to administer. A mechanism based on these principles would provide pricing outcomes to small use non-residential customers that are fair for customers and Embedded Network Sellers.

¹ Source: [2023-24 State Budget \(Budget Paper No. 3, Economic and Fiscal Outlook, Table 8.8\)](#).

2. Recovery of Costs of Renewable Electricity When the Embedded Network Seller is Obligated to Supply Renewable Electricity

While the Code provides for the right for Embedded Network Sellers to recover reasonable costs above the Default Rate Tariff related to the supply of electricity with carbon offset or renewable characteristics under clause 14, this right is only available if a customer elects to receive such electricity. However, an Embedded Network Seller may be obliged to supply renewable energy to tenants and lot owners in an embedded network².

As the Code is currently drafted, there is no ability for Embedded Network Sellers that are in either of these situations to recover such reasonable costs under the Default Flat Rate Tariff.

Embedded Network Seller may not be able to economically supply 100% renewable electricity to Non-residential tenants at the L1 tariff (proposed to be the applicable Default Flat Rate Tariff) if:

- only a relatively small proportion of renewable electricity can be generated and consumed on-site (for example in a multi-storey building with limited rooftop space); and
- the cost of supplying renewable energy from the grid is more expensive than the L1 tariff, for example, due to high amounts of energy consumed in the evening shoulder resulting in an expensive electricity load profile.

Table 3 below shows a representative cost build-up for a site with an 'expensive' load profile supplied with 100% renewable electricity from the grid and that it is more expensive than the Synergy L1 tariff. An example of an 'expensive' load profile is one that consumes high amounts of electricity in the evening shoulder and in summer.

Proposed Amendment

It is proposed that the Default Flat Rate Tariff may be increased by a 'premium' reflective of renewable electricity if:

- if the Embedded Network Seller is obliged to supply renewable electricity to the site;
- the Embedded Network Seller discloses this premium as part of the Disclosure Statement provided to each small-use customer; and
- the Embedded Network Seller complies with the obligations of clause 14.3 regarding auditable written evidence in relation to the supply of renewable electricity.

The premium, for ease of administration, would be equal to reasonable costs incurred by the Embedded Network Seller directly related to procuring renewable energy, capped at the premium for 100% NaturalPower charged by Synergy.

While the Embedded Network Seller should do things it reasonably can to make available information to incoming tenants or lot owners about a premium to the Default Flat Rate Tariff due to 100% renewable electricity, it may not be practicable for the Embedded Network Seller to ensure that the tenancy or lot owner makes disclosures of this premium prior to the customer moving into the

² Note: By way of background, there are circumstances where property owners oblige their tenants to consume all electricity as 100% renewable electricity through lease agreements, or property owners require that the Embedded Network Seller supply 100% renewable electricity to all tenants and loads within the property. These requirements may be imposed by property owners for various reasons including:

- corporate sustainability and decarbonisation targets that have been set by the property owner;
- expectations or requirements of investors and lenders that fund property owners in order to access lower-cost capital and, increasingly, qualify for access to capital;
- benefits to higher Green Star ratings, which are attractive to tenants

property. For example, in a strata plan it is practically challenging for Embedded Network Sellers to keep track of individual lot owners and their leasing or rental intentions.

Table 3: Representative Cost-Build Up For Grid Supply of 100% Renewable Electricity To A Site With An 'Expensive' Load Profile, Compared with Synergy L1 Tariff

Cost Component	c/kWh	Comments
Wholesale Electricity	7.89	Based on the Synergy Wholesale rate of \$73.19/MWh for a 'flat' block of energy in June 2023. The wholesale cost of energy for a business customer consuming high amounts of electricity in the evening shoulder may be higher than this.
Retailer Energy Margin	1.08	Typical margin added onto the wholesale electricity price by a licenced retailer supplying to the 'master meter'. Can range from 0.5 to 2.0c/kWh for small business customers.
Western Power Network Charges	11.53	Based on typically observed unit costs for 'expensive' loads consuming high amounts of electricity in the evening shoulder and in summer.
AEMO Reserve Capacity Charges	3.50	
Mandatory Renewable Energy Certificate Surrender: Small Scale Technology Certificates	1.24	Based on current Small Scale Technology Certificate price of \$40 per STC and the 2023 Small Scale Technology Percentage (16.29%).
Mandatory Renewable Energy Certificate Surrender: Large Scale Generation Certificates	1.01	Based on a Large Scale Generation Certificate price of \$57.50 per LGC and the 2023 Renewable Percentage (18.96%).
AEMO Ancillary Services	0.49	Based on typical charges observed.
AEMO WEM Fees and WEM Regulatory Fees	0.16	Based on AEMO's Draft FY24 Budget and Fees, Table 31 .
100% GreenPower Premium	4.97	Based on 2022-23 pricing published by Synergy (2023-24 pricing not yet available)
Total Unit Cost of Grid-Supplied 100% GreenPower	31.87	May vary +/- 1.5c/kWh
Synergy L1 Tariff	27.90	Price applicable from 1 July 2023

Note: Prices exclude GST and include average network transmission (TSAV 1.0270) and distribution loss factors (QRT2 1.0496) as [published by AEMO](#) to apply from 1 July 2023 (i.e. prices are for electricity supplied to property's 'master meter')

Closing Comments

Enpowered is committed to making 100% renewable energy available and economically sustainable for all its customers. We believe that the proposed changes will allow us and other Embedded Network Sellers to continue to deliver our renewable energy to customers at a fair price.

Note that Enpowered will seek to supply 100% renewable electricity to all its residential customers at a price no higher than the A1 residential tariff. It also endeavours to supply 100% renewable electricity to non-residential customers at a price no more expensive than if that customer had direct access to the Grid at the property.

Enpowered aims to achieve this by maximising on-site renewable generation to greatest extent feasible and absorbing the cost premium associated with importing 100% GreenPower or fully LGC-matched electricity from the Grid.

Thank you for consideration of our submission. If you wish to discuss this submission further, please contact me on [REDACTED]

Yours sincerely,

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Linh Le
Manager