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## 1. Introduction

In accordance with Rule 6.18.1C of the National Electricity Rules (NER), Endeavour Energy is making this submission to notify the Australian Energy Regulator (AER) of its intention to trial two new sub-threshold tariffs from 1 July 2022.

The two proposed tariffs are:

- **Off Peak+:** A flexible controlled load tariff with specific focus on Hot Water Solar soaking and potential EV application.
- **Residential Prosumer:** A two-way tariff with solar soak period with specific focus on PV customers with battery storage.

The overarching purpose of our tariff strategy is to make energy more affordable by providing customers with the information they require to improve network utilisation by making informed and efficient decisions about their use of the network and their investment in new technologies such as solar, batteries and electric vehicles.

The objective of these trials is to investigate new cost-reflective pricing options for customers with a view to making such tariffs more widely available in future regulatory periods. These tariffs have the potential to provide customers with more control over their network electricity bills, improve network utilisation, and enable efficient integration of distributed energy resources (DER) in the distribution network. The trials are expected to provide valuable evidence to support the potential introduction of the new tariffs (or a modified version) as part of Endeavour Energy's suite of electricity network tariffs for the regulatory period commencing 1 July 2024.

The tariff trials provide Endeavour Energy with an opportunity to test new and innovative tariff structures that can meet the future needs of its customers and the distribution network. The emergence of new technologies, such as batteries and Electric Vehicles (EV), and the increasing uptake of solar are changing the way customers interact with the distribution network, and it is important that Endeavour Energy's tariffs keep pace with these changes. The proposed tariff trials set the path for ensuring Endeavour Energy can provide its future customers with more choices and pricing structures that reflect customers' changing technological preferences and energy usage behaviours.

The specific selection of Off Peak+ and Residential Prosumer tariffs goes directly to the desire to provide customers with tariff choice as these tariff types represent two distinct, and we believe, complementary tariff philosophies. With the Off Peak + trial we are providing a tariff option to customers that may not have the time or inclination to consider and respond to tariff incentives and so will allow them to hand over control of their discretionary load to the network or retailer to manage this load to the benefit of both the individual customer and the broader Grid. For those customers who prefer to maintain control of the timing of their consumption, or who would prefer their own equipment manage their response to tariff incentives, the Residential Prosumer tariff uses prices and incentives to signal the cost and benefits of consuming and exporting electricity at different times of the day.

## 2. Summary of notification information

Table 1: Summary of notification information

	Off Peak+	Residential Prosumer
<b>Required Information</b>		
<b>Name of trial</b>	Off Peak +	Residential Prosumer
<b>Objectives of trial</b>		
<b>Retailer engagement</b>	Illustrative tariffs have been consulted on at Endeavour Energy's Retailer Reference Group One-on-one retailer meetings	Illustrative tariffs have been consulted on at Endeavour Energy's Retailer Reference Group One-on-one retailer meetings
<b>Consumer engagement</b>	Illustrative tariffs have been consulted on at Endeavour Energy's Regulatory Reference Group and Joint Regulatory Reference Group Meetings with Essential Energy and Ausgrid.	Illustrative tariffs have been consulted on at Endeavour Energy's Regulatory Reference Group and Joint Regulatory Reference Group Meetings with Essential Energy and Ausgrid.
<b>Proposed tariff structure &amp; pricing</b>	Flexible controlled load (see Table 2)	Two-way pricing with Solar Soak (see Table 3)
<b>Forecast revenue (\$ and % AAR)</b>	\$0.143m; 0.02% of AAR	\$0.220m; 0.03% of AAR
<b>Trial start date</b>	1 July 2022	1 July 2022
<b>Duration of trial</b>	2 years	2 years
<b>Potential changes and triggers</b>	Endeavour Energy will monitor uptake relative to NER limitations on sub-threshold tariffs. Tariff will be closed to new entrants when cap is achieved.	Endeavour Energy will monitor uptake relative to NER limitations on sub-threshold tariffs. Tariff will be closed to new entrants when cap is achieved.
<b>Notification date</b>	25 February 2022	25 February 2022
<b>Optional Information</b>		
Forecast volumes	See Table 8	See Table 8
Potential additions	-	-
Location of trial	-	-
Other	-	-

### 3. **NER and AER requirements**

#### **NER requirements**

Section 6.18.1.C(1) of the NER requires a Distribution Network Service Provider (DNSP) to notify the AER, affected retailers, and affected retail customers of a new proposed tariff that is determined otherwise than in accordance with the current Tariff Structure Statement (TSS). In particular, the NER requires that:

- The DNSP's forecast annual revenue for each tariff is no greater than 0.5 per cent of the DNSPs annual revenue requirement (the individual threshold); and
- The DNSP's forecast annual revenue from all tariff trials is no greater than 1 per cent of the DNSP's annual revenue requirement (the cumulative threshold).

Endeavour Energy's proposed tariffs are within both the individual threshold and cumulative threshold, as shown in Table 6.

#### **AER guidance**

The AER has published a guidance note on its expectations for tariff trials pursued under the regulatory framework. The AER's guidance note states that distributors should provide clear links between the tariff trial and the distributors' TSS strategy. The AER also requests that distributors report on the results of the tariff trials, and how these learnings have been used by the business.

Endeavour Energy's proposed tariff trials aim to further its strategy of moving towards greater cost reflectivity and providing customers with greater tariff choice and the opportunity to better manage their network bills. The alignment of the subthreshold tariffs to Endeavour Energy's TSS strategy is described in Section 1.

### 4. **Eligibility and duration**

This section outlines the proposed duration of the tariff trials and the mechanisms by which customers will be assigned to the tariffs.

#### **Tariff trial period**

Endeavour Energy intends to commence the tariff trials on 1 July 2022, with the trials running over a two-year period, concluding on 30 June 2024. This would allow customers on the trial to potentially transition to a new, AER-approved tariff through the TSS process on 1 July 2024.

#### **Off Peak+ eligibility and assignment**

The Off Peak+ tariff trial will be provided to customers on an opt-in basis. To be eligible for this pricing trial, a customer must:

- Have the metrology and controllable device required to support the trial tariff

Retailers can apply for the trial tariff through our standard tariff change request process. Before approving the request, Endeavour Energy will verify the customer's eligibility for the trial, assess Retailer willingness to share data with Endeavour Energy, and review the impact on revenue limits placed on sub-threshold tariffs under the NER (6.18.1.C).

Endeavour Energy will close the trial tariff to new entrants to ensure the revenue limits placed on sub-threshold tariff under the NER (6.18.1.C) are not breached.

Customers on the Off Peak+ trial may opt-out to an eligible tariff at any time in accordance with Endeavour Energy's current tariff assignment policy. This means that customers can opt -out to our standard Controlled Load tariff options (N50 and N54).

## Residential Prosumer eligibility and assignment

The Residential Prosumer tariff trial will be provided to customers on an opt-in basis. To be eligible for this pricing trial, a customer must:

- Be a residential customer<sup>1</sup>
- Have the metrology required to support the trial tariff

Preference will be given to those customers that have a Solar PV system and/or a home battery system, however a subset of customers without these systems will be admitted to the trial to test the solar soaking function of the trial tariff.

Retailers can apply for the trial tariff through our standard tariff change request process. Before approving the request, Endeavour Energy will verify the customer's eligibility for the trial, assess Retailer willingness to share data with Endeavour Energy, and review the impact on revenue limits placed on sub-threshold tariffs under the NER (6.18.1.C).

Endeavour Energy will close the trial tariff to new entrants to ensure the revenue limits placed on sub-threshold tariff under the NER (6.18.1.C) are not breached.

Customers on the Residential Prosumer trial may opt-out to an eligible tariff at any time in accordance with Endeavour Energy's current tariff assignment policy. This means that customers can opt out to our residential tariff options (N70, N71, N72 or N73).

## 5. Engagement

To date, Endeavour Energy has engaged with the following audiences.

### Stakeholders

Endeavour Energy has engaged with our Regulatory Reference Group (RRG) and a joint, Ausgrid, Essential Energy and Endeavour Energy reference group to discuss tariff trial objectives and structures.

All members of Endeavour Energy's RRG were provided the opportunity to attend the joint discussions with Ausgrid and Essential (and their respective representatives).

The customer groups represented at these meetings are outlined in the table below.

Table 2: Stakeholders and customers represented in tariff trial engagement

Representation	Endeavour Energy RRG	Joint Reference Group
Residential	✓	✓
Vulnerable	✓	✓
Small Business	✓	✓
Large Energy Users	✓	✓
Local Council	✓	✗
NSW Government	✓	✓
Environmental	✓	✓
Australian Energy Regulator	✓	✓

These meetings occurred on:

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<sup>1</sup> As defined in our Network Price List

- **Endeavour Energy RRG** – 27 October 2021
- **Joint Reference Group** – 10 December 2021, 13 January 2022 and 31 January 2022

Follow up meetings have been agreed to share trial outcomes with the joint reference group.

## Retailers

On 5 November 2021, Endeavour Energy provided a presentation to our retailer reference group to notify them of Endeavour Energy’s intention to trial two new tariffs and to invite interested retailers to contact Endeavour Energy for one-on-one trial discussions. This was followed up by a tariff trial information pack, inclusive of indicative pricing sent on 22 December 2021. To date, three retailers.<sup>2</sup> have contacted us for one-on-one tariff trial discussions. Feedback received from these retailers has been supportive with most recognising the need for a residential tariff that is designed for customers who are highly engaged in their interactions with the energy industry. The conversation with retailers will be ongoing and Endeavour Energy is optimistic that a retailer will pass through the network tariff trial price signals directly to the end customer. This outcome would provide a rich source of consumer data on which to base a decision about whether the Off Peak+ and Residential Prosumer tariffs should be proposed in Endeavour Energy’s upcoming 2024–29 TSS.

## 6. Tariff Structure

The charging parameters for the proposed trial tariffs are set out in the table below.

### Off Peak +

*Table 3: Compliance with revenue thresholds for subthreshold tariffs*

	Units	Charging Parameter
Anytime Demand	c/kW/day	Charge applied to maximum energy demand for the month.

The Off Peak+ trial builds on a pre-existing innovative technology trial in the suburb of Albion Park on NSW’s South Coast. As opposed to traditional controlled load technology, the Off Peak + arrangement allows the network or retailer to flexibly control the customers load through their smart meter in response to real-time network or market constraints without the need to maintain a traditional load control network. The key focus of the broader Off Peak + trial is to use residential electric hot water systems as a solar soak for excess PV export, but we believe there is potential application for other discretionary household loads, such as EV.

Our traditional Controlled Load tariffs are structured as a Fixed charge with Anytime Energy rate. For the purposes of this trial, Endeavour Energy is exploring the use of an Anytime Demand structure. We believe network costs are driven by network demand and therefore, pricing on a demand basis is a more cost-reflective structure in general. More specifically, however, an Anytime Demand structure gives Endeavour Energy the flexibility to use the customer’s hot water system to soak excess PV energy without adversely impacting the cost to the customer. Once an appliance on Off Peak + draws demand from the network, the monthly charge for this demand is essentially ‘fixed’ and scaled to the size of the load being controlled. The hot water system can then be used freely by Endeavour Energy throughout the day to soak excess solar without the customer’s bill being adversely impacted by the volume of soaking activities undertaken.

<sup>2</sup> Brighte, Simply Energy and AGL.



## Residential Prosumer

Table 4: Compliance with revenue thresholds for subthreshold tariffs

	Units	Charging Parameter
Fixed	c/day	Access charge reflecting a fixed amount per day.
Non-Solar Soak Energy	c/kWh	Charge applied to all energy consumption outside of the Export Peak Period (10am to 2pm).
Import Peak Period (4pm to 8pm) – Business Days		
High Season (HS) Import	c/kW/day	Charge applied to maximum import energy demand between 16:00 to 20:00 on business days. High-season includes the months November to March inclusive.
Low Season (LS) Import	c/kW/day	Charge applied to maximum import energy demand between 16:00 to 20:00 on business days. Low-season includes the months April to October inclusive.
HS Export	c/kW/day	Rebate applied to maximum export energy demand returned to the grid between 16:00 to 20:00 on business days. High-season includes the months November to March inclusive.
LS Export	c/kW/day	Rebate applied to maximum export energy demand returned to the grid between 16:00 to 20:00 on business days. Low-season includes the months April to October inclusive.
Export Peak Period (10am to 2pm) – All Days		
Solar Soak Energy	c/kWh	Charge applied to all energy consumption within the Export Peak Period (10:00 to 14:00).
HS Export (first 2kW are free)	c/kW/day	Charge applied to maximum export energy demand returned to the grid between 10:00 to 14:00. The first 2kW are free. High-season includes the months November to March inclusive.
LS Export (first 2kW are free)	c/kW/day	Charge applied to maximum export energy demand returned to the grid between 10:00 to 14:00. The first 2kW are free. Low-season includes the months April to October inclusive.

The Residential Prosumer tariff is based on our existing Residential Demand tariff (N72) but includes three additional charging parameters designed to improve network utilisation by better signalling the network cost and benefits of solar PV and battery installations:

- a low-priced Solar Soak period between 10am and 2pm designed to encourage customers to increase their discretionary consumption at this time to soak additional PV export.
- an export charge for PV export over 2kW between 10am and 2pm to signal the forward-looking cost of PV export on the network and to incentivise PV customers to either, increase their discretionary load at times their PV output is high, or shift their export to a time that better manages peak network demand.
- an export incentive for export between 4pm and 8pm business days, the time at which the export can be used to manage peak network demand.

## 7. Indicative pricing

At the time of this tariff notification, Endeavour Energy has developed indicative price levels for the Off Peak+ Residential Prosumer tariff. Endeavour Energy will submit the expected revenue from trial tariffs to the AER as part of Endeavour Energy's 2022/23 Pricing Proposal, due in March 2022. In doing so, Endeavour Energy will ensure the proposed prices continue to adhere to the subthreshold revenue requirements. The tables below set out Endeavour Energy's indicative 2022/23 prices for the tariff trials.

### Off Peak+

Table 5: Indicative Off Peak + prices

	Units	Indicative DUOS Price	Indicative NUOS Price
Anytime Demand	c/kW/day	3.002	3.921

### Residential Prosumer

Table 6: Indicative Residential Prosumer prices

	Units	Indicative DUOS Price	Indicative NUOS Price
Fixed	\$pa	161.00	161.00
Non-Solar Soak Energy	c/kWh	3.398	5.182
Import Peak Period (4pm to 8pm) – Business Days			
HS Import	c/kW/day	15.600	15.600
LS Import	c/kW/day	5.640	5.640
HS Export	c/kW/day	-14.292	-14.292
LS Export	c/kW/day	-4.376	-4.376
Export Peak Period (10am to 2pm) – All Days			
Solar Soak Energy	c/kWh	0.000	1.784
HS Export (first 2kW are free)	c/kW/day	2.946	2.946
LS Export (first 2kW are free)	c/kW/day	0.902	0.902

## 8. Forecast revenues and thresholds

Section 6.18.1C(a) requires that subthreshold tariffs must satisfy both an individual and cumulative revenue threshold. In particular, the NER requires that Endeavour Energy's:

- forecast annual revenue for each tariff is no greater than 0.5 per cent of the annual revenue requirement (the individual threshold); and
- forecast annual revenue from all tariff trials is no greater than 1 per cent of the annual revenue requirement (the cumulative threshold).

As shown in Table 7 and Table 8, Endeavour Energy's proposed sub-threshold tariffs are forecast to fall significantly below both the individual and cumulative thresholds for 2022/23.

Endeavour Energy will continue to monitor customer numbers and volumes on the Off Peak+ and Residential Prosumer trial tariffs. In the unlikely event that that the trials approach the revenue thresholds, Endeavour Energy will close the trial tariff to new entrants.

Endeavour Energy intends to demonstrate ongoing compliance with the revenue thresholds in its annual pricing proposals to the AER for 2022/23 and 2023/24.

*Table 7: Compliance with revenue thresholds for subthreshold tariffs*

Annual Smoothed Revenue Requirement (AAR)	Rules threshold (\$'000)	Expected Trial DUOS (\$'000)	Expected Trial DUOS (% of ARR)
Indicative 2022/23 AAR (DUOS)	830,000		
1% of AAR – Aggregate of all Trials	8,300	363	0.04%
0.5% of AAR – Off Peak+ Trial	4,150	143	0.02%
0.5% of AAR – Residential Prosumer Trial	4,150	220	0.03%

Table 8: Detailed revenue forecast for calculation of subthreshold tariff compliance

	Forecast Quantity	Indicative DUOS Price	Forecast DUOS Revenue (\$'000)
<b>Off Peak+</b>			
Anytime Demand	156,077	3.002	143
Tariff Total			<b>143</b>
<b>Residential Prosumer</b>			
Fixed	500	161.00	81
Non-Solar Soak Energy	2,283,647	3.398	78
<b>Import Peak Period (4pm to 8pm) – Business Days</b>			
HS Import	11,691	15.600	55
LS Import	15,711	5.640	27
HS Export	3,715	-14.292	-16
LS Export	4,153	-4.376	-6
<b>Export Peak Period (10am to 2pm) – All Days</b>			
Solar Soak	268,817	0.000	0
HS Export (first 2kW are free)	1,247	2.946	1
LS Export (first 2kW are free)	1,230	0.902	0
Tariff Total			<b>220</b>
Sub-Threshold Tariff Total			<b>363</b>

## 9. Alignment to TSS strategy

The overarching purpose of our tariff strategy is to make energy more affordable by providing customers with the information they require to improve network utilisation by making informed and efficient decisions about their use of the network and their investment in new technologies such as solar, batteries and electric vehicles.

The objective of these trials is to investigate new cost-reflective pricing options for customers with a view to making such tariffs more widely available in future regulatory periods. These tariffs have the potential to provide customers with more control over their network electricity bills, improve network utilisation, and enable efficient integration of distributed energy resources (DER) in the distribution network. The trials are expected to provide valuable evidence to support the potential introduction of the new tariffs (or a modified version) as part of Endeavour Energy's suite of electricity network tariffs for the regulatory period commencing 1 July 2024.

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The specific selection of Off Peak+ and Residential Prosumer tariffs goes directly to the desire to provide customers with tariff choice as these tariff types represent two distinct, and we believe, complementary tariff

philosophies. With the Off Peak + trial we are providing a tariff option to customers that may not have the time or inclination to consider and respond to tariff incentives and so will allow them to hand over control of their discretionary load to the network or retailer to manage this load to the benefit of both the individual customer and the broader Grid. For those customers who prefer to maintain control of the timing of their consumption, or who would prefer their own equipment manage their response to tariff incentives, the Residential Prosumer tariff uses prices and incentives to signal the cost and benefits of consuming and exporting electricity at different times of the day.