No relief from electricity network supernormal profits

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Key Findings

The recent draft default market offer affecting New South Wales, South East Queensland and South Australia, and the Victorian default offer, indicate that consumers will be facing electricity price rises.

Some 15–33% of the recent DMO and VDO draft residential retail bill rises could be avoided if monopoly electricity networks were no longer allowed to extract supernormal profits.

The Australian government should work with state governments to reduce supernormal electricity network profits, to ease the upward pressure on electricity bills.

Executive Summary

This report estimates how much of the recently announced retail electricity default offer bill rises could be avoided by removing supernormal electricity network profits, which were identified in an October 2022 IEEFA report, Regulated Electricity Network Prices Are Higher than Necessary.

The Australian Energy Regulator (AER) recently released its draft decision on default regulated electricity prices for 2023–24 proposing that residential prices in South East Queensland, New South Wales (NSW) and South Australia are to increase. Similarly, the Essential Services Commission of Victoria released its draft decision on default regulated electricity prices in Victoria proposing that residential prices in Victoria increase.

Between 15% and 33% of the proposed residential retail annual bill increases ($67 and $166 per customer), could be avoided if monopoly networks in South East Queensland, NSW, South Australia and Victoria (excluding regional NSW served by Essential Energy, and CitiPower in Victoria) were no longer allowed to extract supernormal profits. However, in February 2023, the AER handed down a decision allowing monopoly networks to continue to extract monopoly profits, contributing to energy price rises exceeding economy-wide inflation.

> **In February 2023, the AER handed down a decision allowing monopoly networks to continue to extract monopoly profits, contributing to energy price rises exceeding economy-wide inflation.**

The federal government should work with National Energy Market jurisdictions to stem supernormal network profits from 1 July 2023. Governments could overwrite the AER's recent rate of return decision to correct errors in estimating debt financing costs, currently resulting in more than half of all network supernormal profits extracted.

Australian regulator lets monopoly power networks contribute to inflation

On 15 March 2023, the Australian Energy Regulator (AER) released its draft decision on default market offer (DMO) retail prices for 2023–24.[1] Depending on the retail market and customer type, the decision proposes around 20–24% annual bill increases for residential customers in South East Queensland, New South Wales (NSW) and South Australia.[2]

On the same day, the Victorian Essential Services Commission (ESCV) released its draft decision for Victorian default offer (VDO) retail prices for the five retail electricity markets in that state. It proposed average residential retail price increases averaging 30%.[3]

Table 1: DMO And VDO Draft Decisions Summary

Retail market (network)	Coverage	Retail annual bill 2023-23 ($)	Retail bill increase, draft decision ($)	Retail bill increase, draft decision (%)	Average annual bill 2023-24, draft decision ($)
Ausgrid	Sydney, the Central Coast and the Hunter Valley[4]	2122	+455	21.5%	2578
Endeavour	Sydney's Greater West, the Blue Mountains, Southern Highlands & the Illawarra, & the South Coast[5]	2383	+564	23.7%	2947
Essential	Regional, rural & remote NSW & SE QLD[6]	2490	+533	21.4%	3022
Energex	SE QLD[7]	1961	+383	19.5%	2344
SAPN	SA	2275	+484	21.3%	2760
Simple average DMO excl. Essential	NSW, SE QLD, SA	2185	+472	21.5%	2657
Simple average VDO	Victoria	1403	+426	30.4%	1829

Sources: ESCV, Victorian Default Offer 2023–24: Draft Decision Paper, 15 March 2023; AER, Default market offer prices 2023–24 Draft determination, March 2023.
Notes: DMO figures are shown for residential households with controlled load. Similar but not identical results apply to customers without controlled load. Nominal figures have been used.

[1] AER. Default market offer prices 2023–24: Draft determination. March 2023.
[2] Victorian default retail prices are set by the Essential Services Commission of Victoria. Victoria is experiencing similar retail price increases and four of the five Victorian networks are extracting supernormal profits.
[3] Essential Services Commission. Victorian Default Offer 2023–24: Draft Decision Paper. 15 March 2023. Page 4. Note values have been derived from Figure 1: Change in Victorian Default Offer annual bills for domestic customers (assuming annual usage of 4,000kWh).
[4] Ausgrid. Our network area.
[5] Endeavour Energy. Our network coverage.
[6] Essential Energy. Our network area.
[7] Energex. Our Network.

The DMO and VDO retail price increases mainly reflect the impact of high global coal and gas prices on National Energy Market (NEM) wholesale prices since Russia's 2022 invasion of Ukraine. DMO/VDO decisions act to set a ceiling on market retail prices and the draft decisions indicate the size of market-wide retail price rises.

> **Some of the retail price increases could be avoided if monopoly networks were no longer extracting supernormal profits under separate decisions made by the AER.**

Depending on the network area, some of the retail price increases could be avoided if monopoly networks were no longer extracting supernormal profits under separate decisions made by the AER.[8] In October 2022, the Institute for Energy Economics and Financial Analysis (IEEFA) released a report that showed regulated electricity network prices are higher than necessary by nearly 11% or $10 billion over an eight-year period.[9] Weaknesses in the regulatory system allowed these excessively high returns or "supernormal profits" in favour of network shareholders.

While data on supernormal network profits for 2023–24 are not available, and regulated network prices have yet to be finalised for this period, there is no reason to believe they will be different from the 2014–2021 trend identified in the October 2022 IEEFA report.[10] This is because the AER's decision on the regulated rate of return instrument, finalised in February 2023, determined that the system used to set the "allowed" return on capital from 1 July 2023 to 30 June 2028 should remain almost entirely unchanged, and because no other actions have been taken to stem supernormal profits since the October 2022 IEEFA report.[11]

The supernormal profit observations from the October 2022 IEEFA report have therefore been applied to the recently announced bill rises, to estimate how much of the bill rise could be avoided if supernormal profits were removed. The estimated impact of network supernormal profits for 2023–24 on the network component of bills are shown in Table 2, which are determined by applying the eight-year average network revenue as a percentage of actual network cost for each distribution network from the 2022 IEEFA report.[12]

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[8] To be clear, the comments below relate to AER decisions on monopoly network price setting, not to AER and ESCV decisions on DMO and VDO price setting.
[9] IEEFA. Regulated Electricity Network Prices Are Higher than Necessary. 4 October 2022. The IEEFA report drew on eight years of network profitability data released by the AER itself in July 2022.
[10] IEEFA. Regulated Electricity Network Prices Are Higher than Necessary. 4 October 2022.
[11] AER. Rate of Return Explanatory Statement. February 2023.
[12] Total network revenue as a percentage of total actual network cost was sourced from the IEEFA Report in October 2022. For simplicity, this does not include separate transmission supernormal profit impacts and only applies distribution impacts. Victorian values are for all five networks and there is no suggestion that CitiPower will extract supernormal profits.

Table 2: Estimated Impact of Network Supernormal Profits on Network Bills

Network	Network bill 2023–24, draft decision ($)[13 14]	Network bill increase from 2022–23 ($)[15 16]	Average network revenue as % of total actual cost 2014-2021 (%)[17]	Estimated network bill without supernormal profit ($)	Estimated supernormal network profit/loss per customer ($)	Network supernormal profit as % of network bill (%)
Ausgrid	744	+37	110%	676	67	9.1%
Endeavour	783	+13	127%	618	166	21.1%
Essential	1231	+131	99%	1239	–8	–0.6%
Energex	760	+52	111%	685	75	9.9%
SAPN	1020	+4	118%	861	158	15.5%
Simple average DMO excl. Essential	827	+26	117%	710	117	13.9%
Simple average VDO	579	+52	115%	503	76	13.2%

Notes: DMO figures are shown for residential households with controlled load. Similar but not identical results apply to customers without controlled load. Nominal figures have been used.

Table 3 compares the proposed DMO/VDO increases in average annual retail bills (residential with controlled load[18]) with estimated supernormal profits for each DMO electricity network[19] and an average for the five VDO networks.[20]

[13] Essential Services Commission. Victorian Default Offer 2023–24: Draft Decision Paper. 15 March 2023.
[14] AER. Default market offer prices 2023–24 Draft determination. March 2023.
[15] Essential Services Commission. Victorian Default Offer 2023–24: Draft Decision Paper. 15 March 2023.
[16] AER. Default market offer prices 2023–24 Draft determination. March 2023.
[17] IEEFA. Regulated Electricity Network Prices Are Higher than Necessary. 4 October 2022.
[18] Similar but not identical results apply to customers without controlled load.
[19] Some values in Table 1 are lower than the 2022 nominal $100–$150 per customer estimated in the October 2022 IEEFA report. This reflects the fact that the average values included small business customers with larger annual bills.
[20] So far, the ESCV has provided cost breakdowns averaged across the five networks. See Essential Services Commission. Victorian Default Offer 2023–24: Draft Decision Paper. 15 March 2023. Page 4, Figure 1.

Table 3: Estimated Impact of Supernormal Network Profits on Retail Bills

Retail market (network)	Retail bill increase, draft decision ($)[21 22]	Retail bill increase, draft decision (%)[23 24]	Estimated network supernormal profit/loss per customer ($)	Network supernormal profit as % of retail bill increase (%)	Retail bill increase if supernormal profit removed ($)	Retail bill increase if supernormal profit removed (%)	Percentage point change in retail bill increase (%)
Ausgrid	+455	21.5%	67	14.8%	+388	18.3%	−3.2%
Endeavour	+564	23.7%	166	29.4%	+398	16.7%	−7.0%
Essential	+533	21.4%	−8	−1.5%	n.a.	n.a.	n.a.
Energex	+383	19.5%	75	19.6%	+308	15.7%	−3.8%
SAPN	+484	21.3%	158	32.7%	+326	14.3%	−7.0%
Simple average DMO excl. Essential	+472	21.5%	117	24.1%	+355	16.3%	−5.2%
Simple average VDO	+426	30.4%	76	17.9%	+350	24.9%	−5.4%

Notes: DMO figures are shown for residential households with controlled load. Similar but not identical results apply to customers without controlled load. Nominal figures have been used.

If network supernormal profits were addressed in DMO areas across South East Queensland, NSW and South Australia, IEEFA estimates that, for residential customers:[25]

- 14.8–32.7% of retail bill increase could be avoided in four of the five affected DMO markets[26]
- retail bill rises would be 14.3–21.4%[27] instead of the anticipated 19.5–23.7%
- retail bill rises would be $67–$166 less than anticipated in four of the five affected DMO markets.[28]

If network supernormal profits were addressed in Victoria, IEEFA estimates that, for the average residential Victorian customer:

- 17.9% of retail bill increase could be avoided
- retail bill rises would be 24.9% instead of the anticipated 30.4%
- retail bill rises would be $76 less than anticipated (excluding customers in the CitiPower network[29]).

[21] Essential Services Commission. Victorian Default Offer 2023–24: Draft Decision Paper. 15 March 2023.
[22] AER. Default market offer prices 2023–24 Draft determination. March 2023.
[23] Essential Services Commission. Victorian Default Offer 2023–24: Draft Decision Paper. 15 March 2023.
[24] AER. Default market offer prices 2023–24 Draft determination. March 2023.
[25] For residential customers with controlled load.
[26] Excluding Essential Energy, as no supernormal profit was observed over 2014–2021, according to IEEFA's analysis of AER rate of return data in October 2022.
[27] Note the 21.4% represents Essential Energy, for which no supernormal profit was observed and therefore the retail bill increase without supernormal profit is the same as the original draft DMO decision: 21.4%.
[28] The Essential Energy DMO market was not affected, as no supernormal profit was observed over 2014–2021, according to IEEFA's analysis of AER rate of return data in October 2022.
[29] CitiPower did not extract supernormal profits over 2014–2021, according to IEEFA's analysis of AER rate of return data in October 2022.

Supernormal profits are not being addressed – action is required

Since the release of the IEEFA report in October 2022, no action has so far been taken to stem supernormal monopoly network profits. In fact, in February 2023, the AER completed a three-year review of the largest cost in electricity network charges — the return on capital.[30] The review concluded the system used to set the "allowed" return on capital from 1 July 2023 to 30 June 2028 should remain almost entirely unchanged.

> "After reviewing the available cross-checks, a balanced assessment of the performance of the 2018 Instrument leads us to reasonably conclude that the 2018 Instrument has broadly performed adequately."[31]

Outcomes between 2014 and 2021 do not align with the AER's corporate plan objective of ensuring that "consumers pay no more than necessary for safe and reliable electricity".[32]

In NSW, which has a new incoming government, supernormal network profits are being extracted in privately owned Endeavour and Ausgrid network areas. This contrasts with publicly owned Essential Energy serving regional NSW where returns are adequate but no more than adequate.[33]

Unearned supernormal profits are not a feature of incentive regulation. Under incentive regulation, networks with average and low productivity would not be able to extract persistent and large supernormal profits.[34]

"**The combined institutions that govern network regulation in Australia continue to fail to protect energy consumers from the monopoly pricing power of network companies.**

The combined institutions that govern network regulation in Australia continue to fail to protect energy consumers from the monopoly pricing power of network companies.

The AER's failure to recognise or tackle this problem confirms that monopoly network regulation can only be fixed by government leadership.

[30] See AER. Rate of Return Instrument: Explanatory Statement. 24 February 2023.
[31] AER. Rate of Return Instrument: Explanatory Statement. 24 February 2023. Page 24.
[32] AER. AER Strategic Plan 2020–2025. 2020. Page 16.
[33] Financial Review. NSW sells Endeavour Energy stake to Macquarie Group-led consortium. 11 May 2017.
[34] Tahu Consulting. Are Australian power networks being rewarded for efficiency? 11 October 2022.

The Australian Government's Rewiring the Nation initiative seeks to reduce financing costs for future network assets, and this is necessary and welcome. However, it will not reduce continuing excessive returns for the existing $100 billion plus of regulated network assets.[35]

The federal government should work with NEM jurisdictions to stem supernormal network profits, in accordance with the relevant Commonwealth and State laws. Supernormal network profits are contributing to more than 15% of price increases in four of the five DMO network areas and around 18% in VDO network areas, effective from 1 July this year.

> **Supernormal network profits are contributing to more than 15% of price increases in four of the five DMO network areas and around 18% in VDO network areas.**

In the short term, with effect from 1 July 2023, NEM governments could overwrite the AER's recent rate of return decision to correct errors in estimating debt financing costs, currently resulting in more than half of all network supernormal profits extracted. There is no sound case for allowing certain networks[36] to continue to extract supernormal profits simply because they were able to do this between 2014 and 2021.

In the longer run, changes are required to the laws and rules governing the economic regulation of monopoly networks, alongside the introduction of greater transparency and independent monitoring of regulator performance by the Australian Government. These changes could be made by the end of 2023 and could come into effect from 1 July 2024.

AER rate of return review process flawed

Despite consultation with industry and consumers, and advice from experts in regulatory theory, the AER rate of return review process was flawed from the outset.

The review relied on failed theories[37] and circular reasoning that cannot be contradicted by hard evidence or data. Consumer representation in the process was not effective due to constraints on the review's scope and evidence, reflecting ambiguity in the relevant rules.[38]

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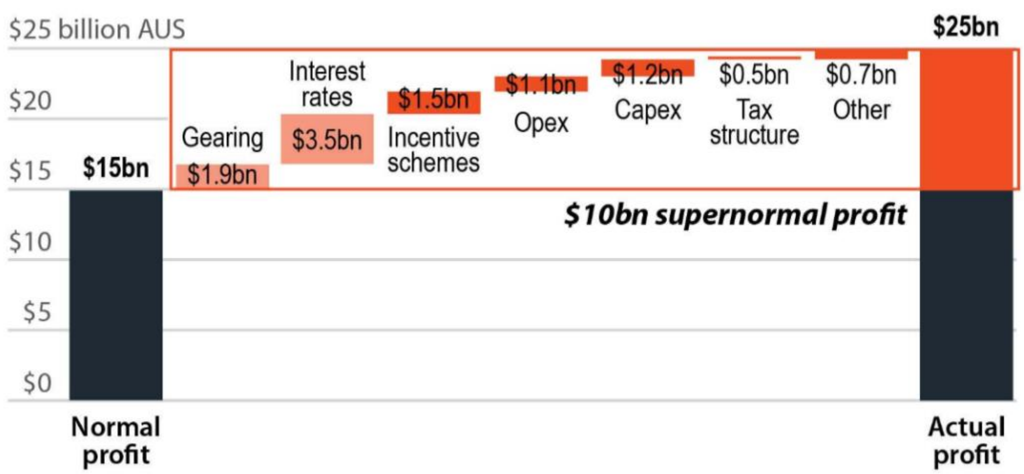
[35] AER. State of the energy market 2021. 2 July 2021. Page 12.
[36] EvoEnergy, Essential Energy and CitiPower did not extract supernormal profits over 2014–2021, according to IEEFA's analysis of AER rate of return data in October 2022.
[37] For example, page 11 of the AER's February 2023 Rate of Return Instrument: Explanatory Statement refers to reliance on the empirically refuted Sharpe-Lintner capital asset pricing model formula.
[38] See discussion in Section 7.3 of IEEFA. Regulated Electricity Network Prices Are Higher than Necessary. 4 October 2022. Pages 75–77.

The AER acknowledges in its review that “without regulation … networks could charge excessive prices, damaging the broader economy and the interests of consumers”.

AER also states that between 2014 and 2021 “electricity networks achieved returns on regulated equity that exceeded forecast returns on equity by approximately 4.2%”.[39]

What the AER does not acknowledge, however, is that a 4.2% excess means that average actual profits are 1.7 times that of allowed profits and total revenues exceeded total costs by nearly 11%. It also does not acknowledge that the two main causes of excess profits from the AER’s two previous rate of return decisions — gearing and interest rates — added at least $5.4 billion of non-existent costs to consumer power bills over 2014–2021.

Figure 1: Incremental Contributions to Supernormal Profits, 2014–2021



Source: AER data; IEEFA analysis. Derived from Figure 4.6 of AER. Electricity network performance report 2022, p. 32.

The AER continues to set prices based on assumed, not actual, debt financing costs. It continues to set debt costs applying a BBB+ benchmark credit rating with 10-year terms,[40] and a 60% debt ratio.

While the AER accepts that network valuations exceed regulated allowances, it then dismisses this evidence as “not sufficiently strong to justify moving to a different benchmark term”.[41] The AER decision prefers false theories and models over market data.

[39] AER. Rate of Return Instrument: Explanatory Statement. February 2023. Page 30.
[40] Ibid. Page 194.
[41] Ibid. Page 201.

In its February 2023 report, the AER refers to a review it commissioned by the Brattle Group on stakeholder feedback on the process used to set the 2018 Instrument. That review concluded that the AER uses "a materially lower authorised return on equity than other regulators".[42] This misses the fact that actual network returns are 1.7 times higher than "authorised" returns.

Network costs and efficient prices are increasing. This reflects rising interest rates, energy transition capital expenditure, rising input costs and falling demand per customer.

These cost increases mean dollar network supernormal profits will likely go up too, pushing up inflation and unaffordability.

Network supernormal profits are after all network reinvestment. Supernormal profits are not being reinvested to gold-plate power networks. Revenues from customers are diverted from much needed new network investments to dividends to shareholders.

Continuing supernormal network profits are delaying the energy transformation.

The Australian Energy Market Operator's optimal development path[43] in the 2022 Integrated System Plan costs the new regulated transmission investment for the energy transition at $12.7 billion. By mid-2023, if the historical trends continue, supernormal network profits since 2014 will be approaching or going beyond $12.7 billion.

[42] Ibid. Page 278.
[43] See AEMO. 2022 Integrated System Plan (ISP). 30 June 2022.

Appendix: Methodology

The DMO decision provided draft 2023–24 annual bills for Ausgrid, Endeavour, Essential Energy, Energex and SAPN with breakdowns for each major component including the total network component, and the change from 2022–23. Annual bills for residential customers with controlled load for those network areas were used as the basis for this analysis. IEEFA calculated what portion of the 2023–24 network portion of the bill was due to supernormal profits, for each network area, by using the eight-year average (2014–2021) network revenue as a percentage of total actual network cost from the October 2022 IEEFA report, Regulated Electricity Network Prices Are Higher than Necessary.[44]

The VDO decision provided the 2023–24 annual bills across Victoria, with breakdowns for each major component including the total network component and the change from 2022–23. This data was aggregated and averaged across the Victorian networks, meaning it was not possible to exclude CitiPower, which historically has not extracted supernormal profits. Annual bills for domestic customers (assuming annual usage of 4000kWh) were used as the basis for this analysis. IEEFA calculated what portion of the 2023–24 Victorian network portion of the bill was due to supernormal profits, by using the simple average across each Victorian network areas of the eight-year average (2014–2021) network revenue as a percentage of total actual network cost from the October 2022 IEEFA report.[45]

A difference between the 2014–2021 network cost data analysed in the October 2022 IEEFA report and 2023–24 network cost data used in the draft DMO/VDO decisions is that the DMO/VDO decisions refer to total network costs including the cost of jurisdictional schemes. The cost of jurisdictional schemes and transmission charges were both excluded from the analysis of distribution network returns in the October 2022 IEEFA report.[46] The impact of jurisdictional schemes on total network costs is currently small and, while increasing in NSW, does not materially affect the analysis in this report.

[44] IEEFA. Regulated Electricity Network Prices Are Higher than Necessary. 4 October 2022.
[45] Ibid.
[46] Ibid. Page 92, point 1.

About IEEFA

The Institute for Energy Economics and Financial Analysis (IEEFA) examines issues related to energy markets, trends and policies. The Institute's mission is to accelerate the transition to a diverse, sustainable and profitable energy economy. www.ieefa.org

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