21 August 2024

ATT: Mitchell Potts, Project contact
Submission lodged via AEMC portal

Dear commissioners

Submission responding to the commission's draft terms of reference for a proposed review into *Electricity pricing for a consumer-driven future*

Thank you for inviting public feedback on the draft terms of reference for the commission's proposed review into *Electricity pricing for a consumer-driven future*.[1]

The commission is to be commended for stepping-up at this moment of truth for consumers and the future of the energy market. While opportunities abound, nothing is assured – most notably, the community's confidence in the energy transition and how it manifests in their lives through the consumer-facing energy market.

The core question for the review is: For whom is the market being designed?

While it is customary to refer to energy "consumers" this is an increasingly unhelpful term. Nowhere else in the economy do people have the opportunity to enter contracts that involve them buying, using, producing, selling and storing a perfectly fungible object. Nonetheless, just because an opportunity exists, does not mean it will manifest – at least not in an effective, efficient, acceptable or beneficial way.

In a recent paper, I explored the consequences for consumers of designing markets and regulatory arrangements based on assumptions rather than reality.[2] That paper informs parts of this submission and its core concern that unless the review addresses the chasm between assumptions and reality, it will gravitate to the same ineffectual recommendations produced by every energy [retail] market review of the past 20 years.

[1] AEMC (2024)
[2] Ben-David (2024)

This submission consists of three sections. The first two sections inform the recommendations in the final section. The submission proceeds as follows.

Section 1 explores the risks for consumers if this review does not properly address the chasm between regulatory assumptions and reality.

Section 2 provides five ways of rethinking how we think about energy consumers and markets.

Section 3 concludes the submission by recommending nine strategies for **transparently, collaboratively, imaginatively and critically** attending to the realities of the market and consumers' experience of it.

I would welcome the opportunity to answer any questions you may have about this submission.

The views expressed in this submission are those of the author and not necessarily those of Monash University, the Monash Business School or the Monash Energy Institute. There is no information in this submission subject to a confidentiality claim.

I wish the commission well in its endeavours.

Yours sincerely

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21 August 2024

1. Doing the same. Expecting different

This section consists of three parts. It first seeks to highlight some of the main premises – ideas, beliefs and assumptions – embedded behind the words of the draft terms of reference. The discussion that follows cautions against the review making unachievable promises about how the benefits from CER will be distributed to consumers. The section concludes by highlighting that unless the review addresses the chasm between its premises and reality, it will drift toward the same ineffectual recommendations produced by every related review of the past 20 years.

<u>Note</u>: This section draws on clauses in the draft terms of reference. The bracketed numbers in the text below refer to the relevant line numbers as they appear in **Appendix A**.

(For interest only: **Appendix B** provides a synthesised version of the review's draft terms of reference in a way that more clearly identifies its apparent purpose, objectives and desired outcomes.)

1.1 The review embeds misconceived premises

The following discussion looks behind the words of the terms of reference to highlight some of the implicit premises upon which the review rests. This includes the way the review has been framed as well as some of its embedded assumptions. For the most part, these framing devices and assumptions are not openly discussed. As Ben-David (2024) explains, they are not discussed because they have become so deeply entrenched in the 'regulatory narrative' that they have effectively become invisible. This review provides a special opportunity to surface and challenge these entrenched ideas, beliefs and assumptions. Two of the most pervasive approaches to regulatory framing, and a number of embedded assumptions, are briefly highlighted below.[3]

These approaches to framing the review, and the impact of its embedded assumptions, profoundly narrow the review's implied "problem statement". In doing so, the draft terms of reference risk shackling the review to the preordained conclusions described in section 1.3.

Two examples of the **implicit framing** embedded with in terms of reference include.

- **market failure -vs- market *design* failure** – The draft terms of reference treat the consumer electricity market in effectively equivalent terms to any other market. This leads the review toward attributing, at least implicitly, observed market shortcomings to well-established sources of 'market failure' – most prominently, information asymmetries and transaction costs.

  The consumer electricity market, however, is not a 'natural' phenomenon. It did not evolve over time through a process involving producers and consumers negotiating the terms of exchange. It is a 'designer market' – an administrative invention entirely defined by its rules and regulations. Everything that happens only happens because it is enabled and

[3] These, and other examples, and their implications for market and regulatory design, are described more fully in Ben-David (2024).

permitted by those rules and regulations. This self-evidently includes the outcomes the terms of reference implicitly attribute to 'market failure'. Put simply, any alleged market failure in the consumer electricity market is, in fact, a failure of market design. If the consumer energy market isn't working, it's because it has been designed for the wrong consumers.

Applying a traditional market failure framework will lead the review to misdiagnosing the problem to be solved; and misidentify the appropriate regulatory response.

- **the endogenisation of net demand** – The terms of reference proceed on the basis that all consumers are part of the envisaged electricity market whether or not they own CER.[4] Consumers with CER are viewed as making decisions about the optimum (or preferred) mix of imported, exported and stored electricity. Consumers without access to CER are viewed as having the opportunity to shift their load in response to price signals (discussed further in section 2.1).

  That is, net demand – the net outcome of consumers' innumerable load, export and storage decisions – is viewed as endogenously responding, and contributing, to self-correcting price signals produced through the market. By viewing net demand as an endogenous variable, the draft terms of reference treat consumers as 'control units' to be triggered through market signals ("incentives") that reward particular behaviours – and by implication, penalise others.

  Consumers are not viewed as mere recipients of electricity and related services, even if that is the way many, or most, consumers view themselves.

The draft terms of reference also contain many embedded assumptions, ideas and beliefs about consumers and markets. These premises are so entrenched in the broader regulatory narrative they have become invisible to the regulatory eye.[5] They are allowed to operate without scrutiny or challenge. Likewise, they lie silently beneath the words of the draft Terms of reference. Ben-David (2024) outlines the misalignment between reality and many of these regulatory premises.[6] Some of the misconceived ideas, beliefs and assumptions that quietly underpin the draft Terms of reference *inter alia* include:

- the underlying belief that if consumers are provided with more (better) information and price signals, they will respond 'rationally' to market opportunities.[7]
- the conflict between regulatory commitments to a "consumer-centric" approach and the real consequences for consumers of exposing them to a competitive energy market which is manifestly selective in nature.[8,9]

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[4] For example, the terms of reference state that even "those who do not have CER technologies like solar, batteries and smart hot water systems would also enjoy direct and flow-on benefits, such as flexibility to use energy more efficiently and save money on bills." (48-50)
[5] The "regulatory narrative" is discussed at length in Ben-David (2024).
[6] Ben-David (2024), Part B
[7] Ben-David (2024), sections B.1.1 to B.1.4
[8] See: https://www.aemc.gov.au/news-centre/media-releases/aemc-launches-major-review-shape-consumer-centric-pricing
[9] Ben-David (2024), section B.1.3

- the reality that there is no objectively correct (or 'true') way to calculate tariffs that are cost reflective – that is, tariff design *always* involves subjective judgements about who the tariffs are being designed to reward (and penalise). This means tariff design and reform always has redistributive consequences. The role of regulators in such subjective and redistributive decisions must be examined very carefully.[10]

- the assumption that markets allocate risks to the parties best placed to manage them will not hold for many, or most, electricity consumers who face insurmountable barriers to exit.[11] These barriers mean consumers can find themselves bearing the risks they are least well-placed to avoid (rather than the risks they're best placed to manage).

- the idea that consumer protections and market design are independent of each other does not hold when everything that happens in the electricity market happens because it is enabled and permitted by market's rules and regulations – leading to the question: Why not focus on designing a market from which consumers do not need protecting (or at least, less protection)?[12]

If the above approaches to framing the review are left unchallenged – and its embedded ideas, beliefs and assumptions are not opened to the critical scrutiny they require – then the review is destined for the ineffectual outcomes described in section 1.3.

1.2 Avoiding unachievable promises

The draft terms of reference make numerous statements about the beneficial outcomes consumers should expect as a result of this review. These outcomes are expressed as:

- enabling consumers to realise the benefits of CER, including consumers without CER (12), by:
  - allowing consumers to save money (44, 50) by altering how they use energy
  - rewarding consumers for providing services to the wider power system (45)
  - ensuring consumers continue to use their CER assets for the reasons they bought them (77)
  - lowering overall system costs (14) thereby benefiting all consumers (47, 52)

There is something deeply amiss with these 'promises' to consumers. These concerns are briefly addressed below.

First, there is no recognition in the draft terms of reference that in order to attain these benefits, consumers (with and without CER) need to engage with the energy market. Alternatively stated, consumers need to proficiently contract with service providers to attain these benefits. For the reasons outlined in Ben-David (2024), contracting is becoming an

[10] Ben-David (2024), sections B.1.6 and B.1.7
[11] Ben-David (2024), section B.1.9
[12] Ben-David (2024), section B.1.5

increasingly complex endeavour – bordering on incomprehensibility for many or most consumers.[13] The draft terms of reference do not acknowledge this reality or that the likely outcome will involve many (or most) consumers entering contracts that do not align with their individual interests. That is, most consumers will attain fewer benefits, and bear greater risks and costs, than the review appears to be promising.

Second, the draft terms of reference make no acknowledgement that 'savings' or 'rewards' are highly likely to be ephemeral. An inevitability – indeed, purpose – of market-based pricing is that it responds dynamically to signal the availability of excess returns. If the sought after energy market is working efficiently, savings and any other forms of return that may be achieved in the short-term will decline, and potentially disappear, as more consumers (and other investors) move to take advantage of any available financial benefits.

The same is true for regulatory pricing of networks, albeit regulators adapt more slowly than markets to changing conditions. For now, consumers may be able to avoid network costs by optimising their load profile (with or without CER) but this is unsustainable over the medium term. The recovery of regulated revenues must go somewhere – either shifting to other customers[14] or necessitating a restructuring of regulated network tariffs.

Third, while it may be true that the optimal deployment of CER and behavioural responses by consumers may lower overall system costs, caution must be exercised to not overstate what this might mean for consumers.

- No matter what, the energy transition requires enormous investment in regulated and market-exposed assets. These investments simply won't happen if they cannot earn the required returns. The cost of these return must, and will, go somewhere – either consumers or taxpayers. There can be no pretending otherwise.
- While the optimal deployment of CER and rational behavioural responses may lower overall system costs, these avoided costs will only be measurable against a counterfactual which no-one will ever see. In this sense, the claimed 'savings' are meaningless to consumers.
- The relationship between system savings and the deployment and use of CER is unclear.[15] If consumers' investment and behavioural decisions are sub-optimal (that is, consumers do not respond 'rationally' to market signals) then the realisable system savings assumed in the terms of reference may be significantly diminished.
- To the extent system savings may be achieved, there are profound reasons to suspect a few proficient consumers will capture most of these savings – leaving all other consumers either no better-off or even worse-off. In other words, it is reasonable to expect potentially significant disparities between 'macro' (system level) and 'micro' (individual consumer) outcomes. Such disparities will have dire consequence for the political economy of, and community support for, the energy transition.[16]

[13] Ben-David (2024), section A.3
[14] This phenomenon is sometimes described as **cost-shifting** between consumers and has been described in terms of a '**death spiral'** as the burden of cost recovery is shifted on to ever fewer customers.
[15] Ben-David (2024), section B.2 discusses this matter at length.
[16] Ben-David (2024), sections B.1.8 and B.2

In short, not all consumers can be expected to be 'winners'. Indeed, it is entirely plausible that the winners will represent a small minority of consumers. The review should adopt realistic assumptions about the consumers' differing levels of proficiency when participating in the foreshadowed electricity market. (Discussed further in section 2.1)

The draft terms of reference should be amended to avoid making an overly abstracted and unachievable promise about the benefits the review will deliver to [all] consumers.

1.3 The review's outcome appears preordained

For the reasons outlined in sections 1.2 and 1.3, the terms of reference silently embody a highly abstracted view of consumers and markets. The review's current approach is in keeping with the dominant 'regulatory narrative' identified in Ben-David (2024). And as that paper foreshadows, by continuing to frame the challenges of the energy transition with reference to these misconceived premises, the draft terms of reference are predetermining the outcome of the review.

It is near-certain that the proposed review – if it proceeds according to the current draft terms of reference – will find itself simply echoing the findings and recommendations of every other [retail] market review undertaken by the commission over the past two decades. That is, the review will conclude with findings limited to:

(1) enabling **more** choice in service providers, products, services and offers

(2) providing consumers with **more** (better) information

(3) encouraging and assisting consumers to shop around **more**, and

(4) exposing consumers to **more** efficient price signals (ie. incentives).

Indeed, material published on the commission's website is already foreshadowing this review is heading toward more-of-the-same. For example:[17]

> *[O]ffering consumers the right products and services … will require that both consumers who do and do not own CER are provided with clear* ***information****, meaningful* ***choices*** *and* ***incentives****, and appropriate protections.* [emphasis added]

The "four mores" listed above have done little to improve consumers' experience with the retail energy market. As recent reports from the ACCC have highlighted, consumers are still failing to navigate their way through this market; and that's after 20 years of experience with retail competition.[18]

[17] See: https://www.aemc.gov.au/market-reviews-advice/electricity-pricing-consumer-driven-future

[18] For example, see ACCC (2023)

If the "four mores" have failed to address:

- regulators' misplaced concerns about market failure (section 1.1) – namely, information asymmetry and transaction costs – over the past 20 years, and
- consumers' concerns and frustrations with the energy market, even when 'simple' flat tariffs prevailed

then it beggars belief they will adequately address these concerns as the consumer-facing energy market increasingly 'complexifies'.

The opportunities presented by this review should not be surrendered meekly to such conformative thinking. There is too much at stake.

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In the 2000s, the energy market regulators enthusiastically pursued the introduction of full retail competition. They did so without ever questioning or testing the ideas, beliefs and assumptions on which they were proceeding. With hindsight, however, it is clear that the most unwelcomed features of the emergent retail energy market could have been foreseen.[19] But they were not foreseen. They were not foreseen because no-one in authority was alert to their own preconceived ideas about consumers and markets.

History cannot be allowed to repeat itself.

Section 2 provides a framework for "rethinking how we think about" the current challenges facing the consumer energy market – to avoid missing the obvious questions; to avoid falling prey to preconceived ideas about consumers and markets; and to avoid repeating the mistakes of the past.

[19] For example: the *confusopoly* of market offers, the prevalence of a so-called '*loyalty tax*', and retailers' *bait-and-switch* marketing strategies.

2. Rethinking how we think about consumers and markets

This review presents a once-in-a-decade opportunity. It cannot be predestined to simply traverse the same well-worn path as the commission's previous market reviews. This section therefore outlines five alternative ways for "rethinking how we think about" energy consumers and markets.

2.1 Consumer heterogeneity

The terms of reference only acknowledge two types of consumers, namely, consumers who own, or have access to, CER and those who do not.

> *Our consumer preference principles will cover consumers who do not have access to CER as well as those who do.* (143)

The terms of reference appropriately define CER broadly to include: solar panels, batteries, home and business energy management systems, electric vehicles, as well as 'smart devices' such as hot water systems which can be controlled or programmed to manage their energy consumption through behaviours, timers, and dedicated apps.[20] While this definition clearly centres around ownership of, or access to, assets (large and small), the terms of reference also state:

> *Crucially those who do not have CER technologies like solar, batteries and smart hot water systems would also enjoy direct and flow-on benefits, such as … flexibility to use energy more efficiently and save money on bills.* (148-150)

This is a crucial statement. It makes clear that, as far as the review is concerned, consumption itself is now a consumer energy resource – that is, load is viewed as a commodity to be traded (used flexibly) through the market and in response to incentives (ie. price signals).[21] This means everyone connected to the grid is viewed as having something to trade. Everyone is viewed as a 'trading unit' within the one electricity market. Householders are viewed on par with large commercial enterprises such as retailers, generators, smelters or data centres – save perhaps for a few "consumer protections".[22] This conception of [all] consumers as 'market participants' does not pass the 'pub test'.

It is not enough to only distinguish between consumers according to whether or not they have access to CER assets. The terms of reference need to be recrafted to also account for consumers' varying levels of proficiency at participating (ie. contracting) in the increasingly complex and risky electricity market. Note, the reasons for their varying levels of proficiency should be treated as irrelevant, that is, exogenous.[23]

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[20] As per (24) to (30)

[21] The interpretation is supported by recent comments from the commission's Chair who stated, "It also means, importantly, how and when customers choose to use energy. Because that is the way we will be able to ensure that people living in homes without a lot of fancy CER kit can benefit, too." Collyer (2024)

[22] As mentioned at (87).

[23] Failure to do so will see the review revert to the "four mores" (section 1.3) because it will proceed on the belief that consumers can be **socially engineered** into proficient market participants.

The review should make no assumptions about the relationship between proficiency and access to assets. There will consumers who own CER who will lack the required proficiency to trade effectively in the electricity market; and conversely, there will be customers who have no assets but who proficiently respond to market incentives by varying the timing of their load.

The review should openly and transparently assess the impacts of the market's rules – and any prospective rules – on a broad suite of consumers according to their access to CER as well as their market proficiency.[24]

2.2 The importance of consumer contracts

A central objective of the draft terms of reference is to support the provision of the "right" products and services to consumers, and at the "right" prices.[25] The reasons given by the draft terms of reference for doing so include:

- aligning market activity with consumer needs and preferences (99), and providing and improving consumer choice (115, 126)
- providing the right incentives to consumers (153) through efficient costs (100) and prices (118) thereby motivating responsive consumer behaviour (101)
- lowering overall system costs (14, 33, 51) thereby benefiting all consumers (47, 52)

These three market outcomes effectively provide a working definition of what the review means when it refers to the "right" products, services and prices. The draft terms of reference, however, are silent on the relationships between the inputs the review is targeting (products, services and prices) and the market outcomes it is pursuing. It appears the review is commencing from the position that if it successfully supports the provision of products, services and (efficient) prices, then the above market outcomes will self-evidently follow. This belief is not supported by history.

Products, services and price structures are merely 'things'. They have no inherent value. In narrowly focussing on enabling the provision of these 'things', the review is conceived as an exercise in supply. The terms of reference do not attend to how these 'things' are received by consumers – let alone how consumers will respond to them. In reality, these 'things' are only brought to life for consumers through the contracts they enter with service providers – provided consumers contract proficiently.

As the range of products, services and pricing structures expands (as the review anticipates), the number of contract variables, and the likely intricacies of those contracts, complexifies at a head-spinning rate. The consequence of more 'things' will be a labyrinthine consumer energy market. If the evidence overwhelmingly shows that consumers are unable to navigate a market

[24] Arguably, a third distinguishing consumer characteristic is **affordability**. This submission is not inclined to support its inclusion for the purposes of this review. This in no way lessens the importance of policies and regulatory measures attending to the problems of energy poverty, energy (in)justice or consumer vulnerability. These are terrible problems, but they should be addressed separately from the challenges of designing regulatory and market arrangements for CER.

[25] As per (97)-(98)

consisting of ‘simple’ (flat price) contracts,[26] then surely the review cannot expect consumers to navigate a labyrinthine energy market successfully. In reality, there is a rapidly increasing likelihood that many (or most) consumers will enter contracts that do not align with their best interests. This will see consumers:

- not receiving the benefits they believed were on offer, and/or
- incurring costs they were not expecting, and/or
- bearing risks they do not understand and are ill-equipped to manage.

Unfortunately, the draft terms of reference are silent on the risks to consumers of such outcomes despite the review’s stated desire to be “centred around the customer” (111).

At most, the review may contend that enabling the provision of “things” represents a necessary condition for reform. Even so, necessity should not be confused with sufficiency. Seeking to satisfy a necessary condition guarantees nothing (as history shows).[27]

The review cannot focus solely on the provision of products, services and (efficient) prices. It must attend to *how* consumers receive these ‘things’ through market contracts in a way that does not expose them to risks they are not well-placed to identify, manage or price.

The review may be tempted to view contract design as a consumer protection measure. Such a view would be profoundly wrong. Contract design is central to, if not synonymous with, market design – as evinced by decades of economic work on optimal contract theory.

Efficient contract design will support consumers to avoid entering contracts that do not align with their interests. Indeed, as Ben-David (2024) notes, the appropriate objective for market and regulatory design for the energy transition should be:[28]

> ***To avoid exposing consumers to risks they are ill-equipped to understand, manage or price.***

This objective does not compete with, or undermine, the NEO. It reflects, and is entirely consistent, with the commission’s statutory objective. The NEO’s exclusive efficiency goal cannot possibly be satisfied if risks are misallocated to consumers simply because they are unqualified to identify, avoid or effectively transact away those risks.

The terms of reference should be recrafted to not only focus on providing products, services and (efficient) prices. They should focus in equal (or greater) measure on how these ‘things’ are represented in the contracts offered to, and entered by, consumers. And then, how those contracts can be designed to avoid exposing consumers to risks they are ill-equipped to understand, manage or price.

[26] ACCC (2023)
[27] Ben-David (2024*) discusses the ill-advised regulatory pursuit of seeking to satisfy an incomplete set of necessary condition and therefore the relevance of the ***Theory of the Second Best*** when contemplating the best way forward. (see Meditation XII)
[28] Ben-David (2024) section C.2.1, regulatory objective R1

2.3 The sustainability of consumer benefits

The terms of reference implicitly conceive of the consumer energy market in broadly equivalent terms to other consumer markets. This is a false equivalence. Unlike other consumer markets, there is no (or negligible) additional utility to be gained from shopping around. Shopping around and trading electricity load, supply and storage delivers consumers no bounty of additional comfort or ease.

The review's numerous references to meeting, matching or aligning with consumers' preferences, are misplaced. These preferences play a negligible (or no) role in the review's sought after incentives for stimulating a behavioural response. For most consumers, the entirety of the promised benefit from 'market participation' is exclusively financial in nature.[29]

That said, and as noted in section 1.2:

(i) The distribution of financial benefits will be uncertain and uneven.

The benefits of participation in a competitive market, by definition, favours those consumers who participate in the market most proficiently. There is no *a priori* basis for supporting the terms' of reference assertion that spillover benefits will accrue to all consumers. For example, when the draft terms of reference state:

> *The Review will support CER integration in the National Electricity Market (NEM) to deliver lower overall costs to **all consumers**.* (13) [emphasis added]

(ii) Consumers' financial benefits are unlikely to endure over the medium-term.

If the entirety of the benefit of market participation is financial in nature for most consumers, then the commitment in the terms of reference to:

> *ensuring consumers continue to use their CER assets **for the reasons they bought them*** (77) [emphasis added]

is unsustainable. Consumers will not indefinitely continue to get the financial benefits for which they bought their CER.

The pursuit of financial benefit is the reason most consumers invest in CER. But if this review were to succeed in producing the competitive market it is seeking, then that market will work to reveal those financial benefits to other consumers (and investors). That is, competition between consumers (and between consumers and other investors) will see excess returns bid away over time. That's what competitive markets do.

Put bluntly, the draft terms of reference are pursuing a beneficial outcome for consumers through the same mechanism that will erode (and possibly destroy) those benefits.

Sophisticated investors will recognise and realistically account for declining future returns on their investments. The same is unlikely to be true for the overwhelming majority of households and small businesses who invest in CER. When the reality of

[29] Ben-David (2024) section B.1.2

market participation materialises, consumers' disappointment will be palpable – leading to the political economy risks mentioned in section 1.2.

It is incumbent upon the review to reckon carefully, realistically and transparently with the consumer benefits that will be made available from the measures it contemplates. At a minimum, this reckoning should include fully outlining: How financial benefits will be obtained by customers? What will be required for them to retain these benefits? And how the availability and nature of any benefits will change over time with a deepening of the market?

2.4 The limits of pricing?

The draft terms of reference focus heavily on prices that will:

- suit consumers "needs and preferences" (99, 116) and "match consumer preferences" (121)
- provide an incentive for the efficient use of the distribution network (118-119) and be consistent with the "principles of efficient tariff design" (148)
- provide CER-managed load and supply to be efficiently integrated into the NEM (13) so that it participates directly, and/or bears on, the balance of supply and demand in the wholesale market.[30]

The following discussion addresses the latter two objectives – namely, the role of prices in supporting both the efficient use of the distribution network <u>and</u> the efficient level of *net* demand by consumers.[31]

Consumers do not face separate prices for network use and for their net demand, respectively. (From the draft terms of reference, it appears changes to this arrangement are not being contemplated.) At every point in time, consumers face a single aggregated price consisting of two main inputs – namely, regulated network tariffs *and* the market-based price of power.[32] It is not clear how the review expects an aggregated price to simultaneously and separately inform consumers' decisions about their use of the network as well as their decision about net demand (and their investment in CER over the medium-term).

While network and power prices may display some degree of cointegration, input price synchronicity is not certain. If these two input prices are 'out of phase' they will counter each other thereby leading to a muted price signal flowing to consumers. Conversely, if they are 'in phase' they could produce an amplified price signal prompting an excessive market

[30] The draft terms of reference indirectly refer to the role of CER in influencing overall system supply and demand through references to low emissions supply (31, 34, 82), reliability or security (33, 40) and energy use or consumption (27, 50, 79).
[31] Section 1.1 describes the endogenisation of net demand.
[32] Other relevant input would include retailers' own operating costs, margins and regulatory costs. These costs are set aside for the purpose of this discussion. Likewise, the potential for price signals for grid supports service are set aside for the purposes of this discussion.

response.[33] Such under- and overreactions will not lead to efficient use of, and investment in, CER or networks (or even grid-scale investments) as required by the NEO.

And of course, in the decentralised CER-oriented market envisaged by the review, price signals may also reflect local conditions as well as the state of the wider network and market.

A cacophony of input prices could result in consumers facing a very 'noisy' price which provides them with unclear (or exaggerated) behavioural and investment signals.

It is worth recalling the so-called, 'Tinbergen Rule' which states a single instrument can only effectively target a single objective.[34] In the current context, Tinbergen's rule invites questions about how the review expects a single consumer-facing price signal to simultaneously provide consumers with incentives for both the efficient use of the network as well as their efficient participation in the energy market.

And **what about retailers?** (and other intermediaries)

As the draft terms of reference note, the prices consumers pay depend on:

> *retailers and energy service providers … effectively packaging and pricing electricity products and services to match consumer preferences* (120-121)

The review should carefully and realistically explore retailers' (and other service providers') commercial incentives when "packaging" multiple volatile input costs into products and services for sale to consumers. In doing so, the review must avoid merely assuming that:

(i) retailers and service providers will seek to create products and services to "match consumer preferences", and

(ii) rules and regulations that encourage and support competition will promote the achievement of (i).

The lessons of the past 20 years of experience with full retail competition (FRC) are instructive and should not be ignored. Despite low barriers to entry and dozens of new retailers entering the market, the conduct of retailers broadly converged on very similar pricing and marketing strategies.[35] These strategies produced neither the retailer conduct consumers valued nor the efficient prices regulators expected. Put bluntly, FRC produced outcomes that could only be explained by some degree of oligopolistic market conduct – despite the market having the affectations of competition.[36]

Markets are about discovery. The consumer-facing energy market allows retailers (and other service providers) to discover how consumers respond to products, services and prices. When consumers are not proficient traders (section 2.1), retailers and other service providers will be commercially compelled to take advantage of that lack of proficiency when "packaging and pricing their electricity products and services". There is nothing surprising or alarming about this observation *per se*. But it does represent a warning for the review. If there are flaws in the

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[33] This concern was discussed in Ben-David (2023)
[34] Tinbergen, J (1952) *On the Theory of Economic Policy*.
[35] For example, see footnote 19 as well as the herding behaviours identified in Ben-David (2024), section A.4
[36] See Ben-David (2015)

market's design – such as failing to account for consumers' barriers to exit and their lack of proficiency as 'traders' – then providers' commercial interests will not align with consumers' private interests. And when that occurs, the market will gravitate toward an equilibrium that is not in consumers' short-, medium- or long-term interests. Alternatively stated, commercially motivated "packaging and pricing of products and services" will see retailers and service providers transfer costs and risks to consumers (and minimise the sharing of benefits) wherever they can.

Nothing in the draft terms of reference attends to this eventuality. Instead, the review appears to be heading toward the "four mores" identified in section 1.3 as though these measures will be sufficient to align providers' commercial interests with consumers' private interests. The evidence in support of such an assumption is scant.

2.5 The minimum viable solution may not be that viable

The history of the consumer-facing energy market indicates regulators (or policy makers) turn to default offers to allay community concerns whenever the market's credibility is on the line. The four critical junctures at which this has occurred are:[37]

- the provision of tightly regulated standing offers[38] when the retail market was opened to competition
- the requirement for retailers to continue providing standing offers even when the price of those standing offers was fully deregulated
- the reintroduction of price-regulated default offers after the loss of community confidence in the retail energy market in the late-2010s,[39] and
- the [proposed] mandatory requirement for designated retailers to make a flat tariff available to consumers after a smart meter is installed.[40]

It would not be surprising, therefore, if this review also pivoted toward recommending some sort of default arrangement to address community concerns with complex tariff structures in a CER-oriented energy market. History suggests this would likely see retailers required to make a simple, flat tariff offer available to consumers. Were such an approach to be contemplated by this review, it would need to be subjected to the most careful and rigorous testing. This testing would need to realistically consider the likely consumer and market response to the introduction of such offers – rather than relying on mere assumptions and abstractions about consumers and markets (section 1.1). Such analysis was not undertaken ahead of the four junctures listed above, meaning at least the first three of these interventions failed in their intentions. The fourth is yet to be implemented.

[37] In Victoria, the first three events occurred 2001, 2009 and 2019, respectively.
[38] Also called Standard Retail Contracts.
[39] The Victorian Default Offer (VDO) in Victoria, and the Default Market Offer (DMO) elsewhere in the NEM.
[40] At the time of this submission, this remained a proposed obligation subject to further consultation. See AEMC (2024a)

This submission is not the place for a full exposition on the shortcomings of these past approaches, but two broad lessons can be gleaned about the introduction of non-price-regulated and price-regulated default offers, respectively.

The introduction of **non-price-regulated default offers** was predicated on the regulatory belief that retailers would show little interest in the price of these offers and focus on competitively pricing their market offers. Unfortunately, such theorising was thoroughly belied by subsequent market conduct. The deregulation of standing offers saw their price rise to absurd levels.[41] It should be expected, at least as a starting proposition, that the same market dynamic would replay itself if a non-price-regulated default offer were now introduced to address community concerns with complicated CER-oriented tariffs. It would be remiss of the review not to explore openly and critically the likely market dynamic that would follow the introduction of a non-price-regulated default offer.

Conversely, the review may consider recommending retailers be required to make available a **price-regulated default offer** (whether in the form of the DMO / VDO, or some other form, is not material for the purpose of this submission). This approach also comes with previously observed risks for consumers and the integrity of the market.

Regulators inevitably take a conservative approach to setting default contract tariffs. At an in-principle level, this involves providing revenue allowances that reflect the marginal retailer's costs rather than the costs of the most efficient retailer(s). It also involves including a 'competition allowance' in the DMO and an allowance for customer acquisition and retention costs (CARC) in the VDO – despite these offers being intended to support precisely those consumers who are not interested in actively engaging with the competitive retail market. Perhaps even more substantially, regulators also make an allowance for retailers' costs of hedging against market volatility. Retailers' true risk appetite and hedging strategies will vary enormously and, for the most part, be unobservable to the regulator. Once again, regulators feel compelled to assume a very conservative approach when making allowances for hedging costs – that is, they adopt an approach that leaves retailers bearing minimum risk, despite the cost this imposes on consumers. In other words, price-regulated default offers involve multiple and substantial buffers (or headroom) designed to ensure they do not interfere with the assumed competitive pricing of market offers. All these buffers can be expected to increase in the riskier market of the future; increasing prices for consumers. These default offers are deliberately designed to put little-to-no pressure on retailers to manage risks and costs more efficiently on behalf of consumers. Moreover, unlike elsewhere in the NEM's regulatory arrangements, there is no sense that the price of regulated default tariffs should reflect and signal the long-term cost of providing electricity.

To put these observations in the bluntest terms: Price-regulated default offers have been designed ('rigged') to safeguard the interests of 'the market' over the interests of consumers.

The review would be doing an enormous disservice to consumers if – rather than offering consumers a 'safe harbour' from an increasingly risky energy market – it proposed regulated default offers deliberately designed to be unattractive substitutes for market offers.

[41] Ben-David (2018) explores the market dynamics that saw standing offer prices rises precipitously following their deregulation.

3. Conclusion & Recommendations

There is a harsh reality hanging over the consumer energy market – namely, it is not a natural market. It is a designer market created and defined entirely by its rules and regulations. Any shortcomings in the market (or the outcomes it produces) represent flaws in its design. Experience with the consumer energy market over the past 20 years indicates it is producing outcomes that do not align with the reality of most consumers' lives. In other words, the market has not been designed for its consumers. And now, as the complexity of the consumer-facing energy market continues to deepen, this misalignment can only be expected to worsen.

Traditional remedies – the "four mores" discussed in section 1.3 – won't bridge the gap. Nonetheless, the review appears to be heading in the same direction as every other review of the consumer [or retail] energy market over the past 20 years.

This submission implores the commission to put in place strategies to prevent the review simply drifting toward more-of-the-same and to redraft the terms of reference to reflect its commitment to these strategies.

While the following recommendations are not comprehensive, they at least address the minimum strategies to which the review ought to commit. These nine strategies involve the review **transparently, critically, collaboratively and imaginatively** attending to the realities of the market and consumers' experience of it.

1) The review should not limit itself to a binary view of consumers – that is, consumers with and without access to CER. It should also fully account for the likely outcomes for consumers with highly varying levels of proficiency in navigating the market.
2) The review must not limit itself to merely satisfying enabling conditions – namely, supporting the provision of products and services. Consumer experience in the NEM very clearly demonstrates that regulatory enablement has not translated into widespread consumer benefits.
3) The review should examine how contracting in the consumer-facing energy market will become increasingly complicated with the expanding suite of services and products, and it should properly account for the risks for consumers when they contract in ways that do not align with their own interests.
4) Contract design is central to market design. Contract design must therefore be central to this review. The review should thoroughly examine how products and services are presented to consumers through contracting arrangements.
5) The review should adopt as its principal objective the design of market and regulatory arrangements that avoid exposing consumers to risks they are ill-equipped to understand, manage or price.
6) The review should reckon carefully, realistically and transparently with the benefits that it claims will be made available to consumers through their participation in the market, as well as any share of lower system costs they might expect.

7) The review should acknowledge tariff design (network and retail) is always a matter of subjective judgement about the distribution of benefits, costs and risks. In the absence of policy guidance, the review should transparently account for what guides its approach to distributing benefits, costs and risks among consumers; and between consumers and other parties involved in the provision of energy and energy-related services.

8) The review should reflect on the observed dynamics of the consumer-facing energy market over the past 20 years – that is, the interplay between consumer and retailer conduct – and explore how these dynamics can be expected to play out in a CER-oriented market.

9) The review should avoid simply reverting to default offers as the neatest plausible solution to the risks facing consumers.[42] However, if the review were it to turn to this solution – whether price-regulated or not – the review should realistically examine market dynamics and regulatory assumptions to ensure the default offer is genuinely centred on providing consumers a 'safe harbour' from the complexities of the market.

In some respects, all of these strategies are just alternative ways of imploring the commission to avoid relying on abstracted ideas and stylised assumptions about consumers, markets and regulation.

As noted at the end of section 1, many of the shortcomings of past [retail] energy market reforms could have been foreseen. But they were not foreseen because those leading the reforms did not question the ideas, beliefs and assumptions on which their reforms were predicated. They failed to ask the right questions because they were not alert to their own preconceived ideas about consumers and markets.

History must not be allowed to repeat itself. There is too much at stake.

— END —

[42] As the essayist H. L. Menchen observed in a 1920 collection of essays, "There is always a well-known solution to every human problem—**neat, plausible, and wrong**." [emphasis added]

APPENDIX A – Terms of reference with numbered lines

DRAFT AEMC Terms of Reference

Electricity pricing for a consumer-driven future

Purpose of this document

The Australian Energy Market Commission (AEMC or Commission) is initiating a review to examine the future of electricity products and services, and the prices consumers pay for these. The review, titled *Electricity pricing for a consumer-driven future* (the Review), will consider the important role that electricity pricing, products, and services will play in supporting the diverse needs of customers, including delivering the consumer energy resources (CER) necessary for the energy transition.

We consider that this is an important review, required under the Consumer Energy Resources (CER) Roadmap, to realise the benefits of CER for all energy consumers, including those without CER. The Review will support CER integration in the National Electricity Market (NEM) to deliver lower overall costs to all consumers.

We are publishing these draft Terms of Reference to inform stakeholders about the Review and to seek their input. We encourage stakeholders to engage with the Review at this early stage, and in our future forums. We will facilitate a public forum to elicit stakeholder views on these draft Terms of Reference.

Following stakeholder input, the Terms of Reference will be finalised, and the Commission will publish a consultation paper seeking stakeholder input on the suite of issues we intend to consider in the Review.

Consumers' adoption of CER is an important part of the energy system

Millions of Australian households and businesses are embracing CER, from solar panels, to batteries, home and business energy management systems and electric vehicles.

People are also using CER in the form of 'smart devices' such as hot water systems at home or at work and controlling or programming their use to manage energy consumption through behaviours, timers, and dedicated apps. Alongside CER, 'distributed energy resources' (DER), such as neighbourhood batteries and Virtual Power Plants (VPPs), are a growing part of the power system.

Widespread government commitments to achieve net zero emissions by 2050 are accelerating this shift and CER and DER will play a critically important role in Australia's energy transformation, helping to reduce overall system costs, improve reliability and achieve a secure, low-emission energy supply for all.

Successful integration benefits all consumers, including those without CER

As with any new technology, there are risks and opportunities, but the research tells us that if CER is integrated well, the power system will operate more smoothly, and consumers and industry will enjoy the benefits of more cost-efficient and reliable energy.

Benefits for consumers with CER technologies would include:

- flexibility in how and when they use energy so they can save money within their own

home or business
- having the option to allow their CER technologies to be used in the wider power system and to be rewarded for that
- contributing to the achievement of a net zero energy system
- lower overall spending on network infrastructure.

Crucially those who do not have CER technologies like solar, batteries and smart hot water systems would also enjoy direct and flow-on benefits, such as:

- Flexibility to use energy more efficiently and save money on bills.
- Benefiting from the lower system costs that integration of CER can deliver, which will reduce costs passed to all consumers. This includes avoiding increases in network costs by better integrating EVs in the NEM, for example.
- Net zero in the NEM as more CER technologies contribute to a cleaner system.

Successful integration of CER would also require fewer new large-scale infrastructure projects to keep the system running, which often come with their own integration challenges from acquiring social licence to achieving connection.

The benefit of getting it right is significant, but there is more work to do

A range of studies has estimated the net benefit of effective integration and coordination of CER to be between $1 billion and $6.3 billion by 2030 - 2040 (CSIRO and Baringa Partners, 2019; ARENA and NERA Economic Consulting, 2022). The Energy Networks Australia (ENA) Electricity Network Transformation roadmap highlighted that $16 billion in network infrastructure investment could be avoided by CER/DER coordination.

CER integration will require a multifaceted approach that matches the complexity of the task. A CER Taskforce convened by Energy Ministers has developed and published an implementation plan in the form of a 'CER Roadmap' that defines and will help to drive the CER integration actions needed.

Energy market bodies are driving a number of interrelated reforms that aim to integrate these resources and realise their full potential. The Energy Security Board's (ESB) Consumer Energy Resources and the Transformation of the NEM report set out key elements of the work plan.

A key challenge involves offering consumers the right products and services

Successfully integrating CER starts with serving all energy consumers well. The products and services offered, and their prices, must ensure a diverse set of consumers:

1. can continue to use their CER assets for the reasons they bought them
2. have the opportunity and incentive to:
   a. adjust their energy use
   b. make their CER assets available in ways that benefit themselves and other energy consumers
   c. contribute to reducing emissions
3. benefit from efficient and effective integration of CER, whether they own such assets or not.

Meeting this challenge will require that both consumers who do and do not own CER are provided with clear information, meaningful choices and incentives, and appropriate protections. We must better understand and respond to the reasons consumers may not want to make their assets available, even when the rewards from doing so may benefit them directly, and the broader community.

We are initiating a Review to look at the market and regulatory arrangements governing networks and retailers

There are clear interrelations between consumer outcomes, retail pricing, and network tariffs. While networks create tariffs intended to reflect the behaviours driving network costs, retailers are responsible for packaging and communicating these tariffs to consumers in products and services. These of course have prices, and sometimes rewards, attached.

All of this takes place within a set of market and regulatory arrangements. Getting the right products, services, and prices to consumers requires arrangements that are:

- aligned with consumer needs and preferences
- efficient
- effective.

The current arrangements for electricity network and retail pricing may not deliver the best future for consumers. These arrangements were conceived at a time when energy flowed in one direction and consumers' energy use was inflexible. This has led to some existing issues that need to be addressed, and more issues will likely emerge as the transition proceeds.

This Review will consider how these arrangements should evolve, or even potentially be redesigned, to make sure that they are best positioned to seize the opportunity that CER integration presents.

Our Review will be broad, ambitious, and future-focused

Our work will be centred around the customer. It will consider consumer preferences, and how the products, services, and pricing offered by retailers and networks can meet these.

The Review will have three key focus areas

The Review's key areas of focus are:

1. market arrangements that provide for consumer choice between a range of appropriate products, services, and associated prices that suit their needs and preferences
2. the role of distribution networks in enabling the right products, services, and incentives for consumers, and the efficient cost and pricing outcomes that result
3. the role of retailers and energy service providers in effectively packaging and pricing electricity products and services to match consumer preferences.

The interface between these areas will be a key consideration for the Review.

We will take an inclusive view of flexible CER across both large and small consumer segments. We will also consider whether third-party energy service providers and innovators now and in the future are supported in playing a role, or set of roles, to improve choices and outcomes for consumers to engage with network opportunities.

We do not intend to consider:

- transmission network pricing, and the downstream communication of such pricing, to transmission network customers, generators, and distribution networks
- a review of the wholesale electricity market
- a full review of the consumer protection framework (as recently completed by the AER)
- issues being considered through other related reforms as outlined in later sections of this document.

Our work will be guided by a set of principles

We will apply a set of consumer preference principles to inform our assessment of potential solutions.

To develop principles we will reference existing analyses of consumer preferences around energy prices, products, services, and CER. We will also consider whether consumer preferences may change in the future as technology and innovation reshape the energy landscape.

Our consumer preference principles will cover consumers who do not have access to CER as well as those who do. We will consult through the development of the principles, and we may supplement our analysis with customer research.

While we will be open to all potential solutions, the work of the review will also be guided by the National Electricity Objective (NEO), the National Energy Retail Objective (NERO), and principles of efficient tariff design and of using competitive markets to deliver effective consumer outcomes.

We will identify opportunities and make recommendations

The Review will make recommendations, both shorter- and longer-term, to deliver the vision for the future. This may include changes to:

- the incentives, roles, responsibilities, and technical requirements of retailers and distribution network service providers
- the safeguards required for consumers both under the rules and other regulatory arrangements.

Recommendations will be targeted to address existing issues, exploit future opportunities, and navigate anticipated bumps along the road. We will consider where previous reform efforts have been less successful and will design recommendations that can be implemented and are ultimately impactful for consumers.

We will make final recommendations to the Energy Ministers in accordance with these Terms of reference. The Commission may recommend changes to the National Electricity Rules (NER), National Energy Retail Rules (NERR), and any other arrangements.

We will collaborate with stakeholders in delivering the Review

The Commission is committed to undertaking the Review in an open, collaborative, and transparent manner. In addition to our early engagement and consultation processes, this will involve making use of existing AEMC forums plus establishing a Stakeholder Reference Group to seek ongoing input

from a range of interested stakeholders, including on the scope for the Review.

Stakeholders with an interest in the Review are expected to include:

- Consumer groups and advocates including small and large businesses,
- Market bodies, jurisdictions, and other regulators, including:
  - Energy Consumers Australia (ECA),
  - the Australian Energy Regulator (AER),
  - the Australian Energy Market Operator (AEMO)
  - Commonwealth, state, and territory jurisdictions, and
  - the Australian Competition and Consumer Commission (ACCC)
- The Australian Energy Council (AEC)
- The Energy Charter
- Electricity market retailers
- Energy Networks Australia (ENA)
- Network distribution businesses
- The Australian Renewable Energy Agency (ARENA)
- Other interested parties, including third-party aggregators and other non-retail energy service providers.

The Review is part of a broader set of reforms

The Review will consider other broader CER reforms underway or recently completed as outlined in the CER Roadmap.

Related reforms that directly intersect with this Review include but are not limited to:

- AEMC
  - Accelerating smart meter deployment rule change
  - Unlocking CER Benefits through flexible trading
  - Integrating Price Responsive Resources
  - Empowering consumers with real-time data.
- Other reforms and trials
  - AER Review of consumer protections for future energy services (completed)
  - AER review and interim guidance note for flexible export limits
  - ECA work on consumer sentiment, preferences, and trust
  - Ausgrid's Project Edith trial of dynamic, locational, short-run marginal cost pricing
  - Project Edge trial of CER participation (completed).

Proposed timetable for the Review

Indicative dates	Milestone
Phase 1: Initiation engagement – issues and directions	
July 2024	Initiate Review (publish draft Terms of Reference for comment)
July - August 2024	Establish Stakeholder Reference Group and ongoing stakeholder engagement
November 2024	Publish Consultation Paper and final Terms of Reference
December 2024	Close of Consultation Paper submissions
August 2024 – February 2025	Stakeholder engagement including forums and workshops
April 2025	Publish Directions Paper (TBC)
Phase 2: Engagement – options and implementation	
May 2025	Close of Directions Paper submissions (TBC)
September 2025	Publish Draft Report
October 2025	Close of Draft Report submissions
May - November 2025	Stakeholder engagement including forums and workshops
March 2026	Publish Final Report

APPENDIX B – Synthesized terms of reference

The **PURPOSE** of the review is to:

- examine the future of electricity products and services, and the prices consumers pay for these [services] (6-7)
- make sure [consumers] are best positioned to seize the opportunity that CER integration presents (107)
- deliver the vision for the future (151)

The review's **OBJECTIVES** are to:

- to enable and support the provision of "right" products and services to consumers, and at the "right" prices (9, 97-98)
- deliver the CER necessary for the energy transition (10), including achieving net zero emissions (31-34)
- enable consumers to realise the benefits of CER, including consumers without CER (12), by:
  - allowing consumers to save money (44, 50) by altering how they use energy
  - rewarding consumers for providing services to the wider power system (45)
  - ensuring consumers continue to use their CER assets for the reasons they bought them (77)

The review is pursuing electricity market **OUTCOMES** that are:

- aligned with consumer needs and preferences (99), centred around the customer (111), and provides and improves consumer choice (115, 126)
- efficient (100) in terms of costs and prices (118), thereby providing the right incentives to consumers (119)
- has the most effective impact in terms of motivating responsive or changed consumer behaviour (101)
- lowering overall system costs (14, 33, 51) thereby benefiting all consumers (47, 52)
- consistent with the NEO, NERO, efficient network tariff design, and use competitive markets to deliver effective consumer outcomes (146-149)

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