

Submission to Australian Energy Regulator

Evoenergy Electricity Network Regulatory Proposal 2024–29

May 2023

The Conservation Council ACT Region is the peak non-government environment organisation for the Canberra region. Since 1981, we have spoken up for a healthy environment and a sustainable future for our region. We harness the collective energy, expertise and experience of our more than 40 member groups to promote sound policy and action on the environment.

We campaign for a safe climate, to protect biodiversity in our urban and natural areas, to protect and enhance our waterways, reduce waste, and promote sustainable transport and planning for our city. Working in the ACT and region to influence governments and build widespread support within the community and business, we put forward evidence-based solutions and innovative ideas for how we can live sustainably.

At a time when we need to reimagine a better future, we understand that the changes we need will only happen with the collective support of our community.

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Introduction

The Conservation Council ACT Region appreciates the opportunity to provide comment to the Australian Energy Regulator about Evoenergy's 2024–29 Electricity Network Regulatory Proposal¹.

The Council has been an active member of Evoenergy's Energy Consumer Reference Council (ECRC) for several years, participating in meetings and writing submissions on its gas and electricity network proposals. We appreciate the opportunity to represent the environment and the views of our Member Groups in Evoenergy's planning.

The Council acknowledges the leadership being shown by the ACT Government in committing to phasing out the fossil gas network in the Territory, and that this policy commitment is being supported and reflected by Evoenergy's commitment to transition gas customers onto the electricity network. We appreciate that Evoenergy and the AER are in uncharted territory, attempting to navigate increasing complexity of network requirements in a period of rapid technological change, high cost-of-living pressures and accelerating change in climate and environmental factors.

However, the imperative for emissions reductions has been evident since the 1970s and the ACT's policy direction has been clearly articulated for over three decades through its Climate Change Strategies, legislated emissions reduction targets, Climate Emergency Declaration and commitments in the 2020 Parliamentary and Governing Agreement.

The Synthesis Report of the IPCC's Sixth Assessment Report (AR6-SYR) released in March 2023 is unequivocal in its statements about the urgency required in global emissions reductions.

"Keeping warming to 1.5°C above pre-industrial levels requires deep, rapid and sustained greenhouse gas emissions reductions in all sectors. Emissions should be decreasing by now and will need to be cut by almost half by 2030, if warming is to be limited to 1.5°C."²

Evoenergy's electricity network planning and investment must reflect this urgency. Its tariff and pricing structure must encourage Canberra households and businesses to continue to install rooftop solar PV and battery systems and electrify all gas appliances and fossil-fuel vehicles. It should be investing directly in these household and community-level systems as an essential element of its network. Such investment would effectively purchase emissions reductions and improve the energy-efficiency of the network, helping to manage and distribute peak loads through smart metering, thereby reducing the need for large-scale generation and storage. This funding should be directed initially towards low-income and public housing, and complex and commercial buildings. Evoenergy should also be careful to not "gold plate" the electricity network for the maximum possible demand but look instead to existing examples of all-electric developments such as Ginninderry for realistic demand and supply loads.

Notwithstanding that the ACT admirably offsets 100% of its electricity consumption through contracts for renewable electricity generation, there is still a role for the ACT to play in further displacing fossil fuels from the national electricity grid by installing rooftop solar and battery

¹ Evoenergy, 2023, Regulatory proposal for the ACT electricity distribution network 1 July 2024 to 30 June 2029, https://www.aer.gov.au/system/files/Evoenergy-Regulatory%20proposal-January%202023_Public.pdf

² IPCC, 2023, 'Urgent climate action can secure a liveable future for all', Press release, 20 March, https://www.ipcc.ch/report/ar6/syr/downloads/press/IPCC_AR6_SYR_PressRelease_en.pdf

systems right across Canberra and reducing our collective electricity consumption. Imagine if the ACT could become a net producer of clean electricity!

This submission provides comments on selected aspects of Evoenergy's community engagement and revenue proposal, in response to the AER <u>Issues Paper</u> Evoenergy Electricity Distribution Determination 1 July 2024 – 30 June 2029.

Community engagement

The Council is pleased that Evoenergy regards community engagement, particularly the Energy Consumer Reference Council (ECRC), as an embedded 'business as usual' function.

1. Do the key themes from Evoenergy's engagement resonate with your own preferences? Are there additional issues you would like to see influence Evoenergy's proposal and our assessment of the proposal?

The Council endorses the recommendations of the Community Panel that:

- "The operating environment is actively evolving, such that it would be inappropriate to prioritise one recommendation over another, and that each may need to adapt to changing circumstances."
- The consumer values identified, being: reliability of supply, affordability, supporting
 vulnerable consumers, effective climate change responses, responsive tariffs, and
 ongoing education and engagement, were values that Evoenergy should proactively and
 continuously incorporate when planning for the future."

The Council's key areas of interest/concern are emissions reductions, climate resilience and other environmental impacts of the electricity network, such as urban trees and biodiversity. Our objective in participating in consultation is to ensure that Canberra transitions rapidly and equitably off fossil gas, whilst improving the reliability of the electricity network in a warming climate and rapidly evolving technological needs (rooftop PV and battery systems and electric vehicles).

The Council is pleased to note that Evoenergy's proposal has considered:

- How to achieve the lowest price outcome for its customers while establishing the foundation for the bi-directional energy network of the future
- changes to assumptions underpinning peak demand forecast and capex program to reflect the ACT Government's policy announcements in 2022,
- the costs of projects noting uncertainty about the pace and scale of the transition (\$150m for contingent projects), and
- triggers and mechanisms to increase capex if required, with consumers paying for the projects only if they are approved by the relevant regulator.

2. Do you think Evoenergy has engaged meaningfully with consumers on all key elements of its 2024–29 proposal? Are there any key elements that require further engagement?

The Council believes Evoenergy staff were sincere in their efforts to seek community views and iteratively improve their processes for doing so.

Our observation of ECRC meetings is that they lacked the multicultural diversity representative of the Canberra community. Perhaps Evoenergy has other avenues of consultation, such as its forum with ACTCOSS, but it was a very "white" room.

The Community sessions also feel a bit segregated from other interest groups, ie the ECRC consists only of Evoenergy and community groups. We never get to hear directly from tradespeople or developers or commercial customers or energy retailers or climate scientists, and they don't get to hear directly from the community groups. Maybe Evoenergy thinks industry consultation is too technical for community groups, or there would be too much content to fit into such a mixed group meeting, or that it would be too complex to have representatives from across the spectrum in a single meeting, but we suggest it would be helpful for us to understand the perspectives of industry and vice versa. The ACT Government's Pathway to Electrification forum on 10 Nov 2022 was a good example.

In terms of specific technical concerns or suggestions:

- Evoenergy's feed-in and consumption tariffs need to be carefully balanced to not disincentivise households from installing rooftop solar PV and battery systems, as this distributed generation and storage will be essential in reducing the need for (and investment in) commercial-scale batteries and peak generation.
- The ACT Government's Sustainable Household Scheme is lovely for middle-class homeowners, but we need greater direct funding of rooftop solar, batteries and electrification for low-income and public housing – Evoenergy should be subsidising this as network investment and/or purchasing emissions reductions.
- Canberrans need greater resilience in the electricity network, eg more localised networks with local storage, so that power outages can be localised and easily restored with backup measures such as portable batteries. Feedback from our own public engagement says this is especially important in maintaining consumer confidence as households get off gas and rely solely on electricity.
- The Council appreciates that there are many factors influencing the selection of trees to be planted near power lines. We recommend planting mixes of native species wherever practicable (rather than introduced species in monoculture plantings), to deliver multiple ecosystem services, particularly shade and habitat for native birds, reptiles, marsupials and insects.

3. To what extent do you consider you were able to influence the topics engaged on by Evoenergy? Please give examples.

It is clear from previous engagement on the gas network that Evoenergy revised their plans in response to consultation and ACT policy (which is also influenced by community feedback).

They are "hearing" community concerns about electricity tariffs and services. That does not always mean community gets what they want, because Evoenergy is still a commercial entity and has a huge number of factors to balance. But we do see evidence in their revised proposals that they are taking community input into account, such as revisions to feed-in tariffs for households with solar PV and batteries.

"The proposal includes new tariffs designed to send signals to owners of electric vehicles, solar panels and batteries to support efficient network use (and investment decisions) by these owners. These tariffs will more accurately reflect the impact that customers' use of electricity has on the cost of running the network."

It is clear that community groups are vital in helping Evoenergy understand the impacts of their decisions on their customers and pushing them to factor social equity and environmental imperatives into their planning and strategic objectives.

We can see some reflection of comments we provided previously about the potential for rapid acceleration of new technology uptake in the \$150m for contingent projects plus triggers for those projects.

Comments on selected aspects of Evoenergy's revenue proposal

4. Do you have views on Evoenergy's proposed depreciation approach, as set out in its 2024– 29 proposal?

A year-by-year tracking approach to depreciation seems reasonable in a period of rapid technological change and transition off the gas network.

5. Do you consider Evoenergy's capex proposal addresses the concerns of electricity consumers as identified in the course of its engagement on the proposal?

The Council notes that Evoenergy proposes to recover \$990.2million from its consumers over the 2024–29 period in real terms, a 4% decrease compared to 2019–24, and that the network component of bills will increase by about 1.3% or \$7 a year for residential customers, varying over subsequent years.

While \$7 may be inconsequential for middle- and high-income households, the actual increase may be higher and will certainly be proportionally much greater for low-income households. Evoenergy must work with retailers to ensure these charges are clearly communicated to customers and that support programs for vulnerable customers are proactive in monitoring the impacts.

6. Do you consider Evoenergy has demonstrated and supported the need for the increase in augmentation capex?

At the ECRC meeting on 1 December 2022, Evoenergy presenters noted that "the future is no longer like the past", ie, that historical data is of limited value in predicting or planning for the future.

It appears appropriate that the largest component of Evoenergy's proposed capex is Augmentation capex guided by the forecast uptake of electric vehicles (EV's) and household electrification in response to the ACT Government's zero emissions vehicles and electrification strategies.

This component needs to be closely monitored as EV uptake in the ACT is showing signs of rapid, exponential growth.³ With a much wider variety of EVs entering the Australian market in 2023 and 2024, this trend will only accelerate.

Although the ACT Government's approach to electrification is to "make the next one electric", ie, replace gas appliances only at the end of their working life, it would be reasonable to also expect the rate of household electrification to accelerate as more Canberrans become aware of the phasing out of gas and the benefits of electric appliances.

Network augmentation will benefit those households that can afford to buy EVs, solar PV and battery systems, and heat pumps, while the increase in network costs is borne by all network customers, disproportionately affecting low-income households that cannot afford the upfront costs of such technologies. Low-income households effectively cross-subsidise wealthy households, increasing inequity.

Evoenergy should invest directly in supplying and installing rooftop solar and battery systems, efficient electric appliances and smart meters in low-income households as part of its capital expenditure. This would effectively buy emissions reductions and efficiency in the electricity network, reducing the need for investment in large-scale batteries and generation. Homes with rooftop solar and batteries are also more resilient in the event of power outages. EV registration data and Sustainable Household Scheme application data by suburb and socioeconomic stratification could help inform this analysis and planning.

7. Do you consider Evoenergy has explored all non-network options to address or alleviate the likely capacity constraints arising from the uptake of electric vehicles, including the consideration of tariff solutions and network load control options?

Evoenergy needs to monitor the responsiveness of customers to tariff signals, and should supplement this with targeted communications to educate customers about efficient routines for charging household batteries and electric vehicles, when to heat hot water, when to run high-consuming appliances such as dishwashers and heaters, when to feed rooftop solar power into the grid, how to use smart meters to monitor and optimise energy production, storage and consumption. Many of these technologies will be completely new to Canberrans who will be highly reliant on the advice of installers and energy retailers. Itemising consumption and feed-in tariffs on electricity bills will not be enough on its own to drive behaviour change from customers who are not literate in energy or have little capacity or interest to even contemplate such complexity or adjust their behaviours around everyday living constraints.

Evoenergy should invest directly in low-income households. install smart meters for low-income households

³ Australian Electric Vehicle Association ACT Branch, 2023, 'EV registrations in the ACT', https://aeva.asn.au/ACT/

Battery owners may also be protective of their home-generated power and not be cooperative about having their battery drained by Evoenergy at peak demand times, particularly if it forces the household to then draw from the grid overnight. Loss-aversion is a powerful psychological driver.

People do not behave "rationally" in response to simple cost signals as economists would like to assume.

8. Do you consider Evoenergy's approach to forecasting replacement capex is appropriate and likely to produce a forecast of efficient replacement capex?

Replacement of aging infrastructure is essential for network reliability. In planning for replacement and upgrade, Evoenergy should look for opportunities to move overhead wires underground for greater climate resilience (eg bushfires). This would have the additional co-benefits of improving visual amenity and allowing for restoration of urban greenery.

9. Do you consider Evoenergy's proposed contingent project should be included as contingent project for the 2024–29 period? Are the proposed project triggers appropriate?

The Conservation Council is pleased to see the inclusion of a contingent project in response to the potential for faster-than-expected electrification and uptake of EVs. However, the triggers should be more specific and therefore more transparent.

The Conservation Council also recommends a more strategic and proactive approach to electrification of households with gas. If Evoenergy was to systematically directly invest in replacing gas appliances with energy-efficient heat pumps and rooftop solar and battery systems for low-income households and public housing in targeted locations, it could have greater control over network planning and capex of all categories.

EV registration data, Sustainable Household Scheme application data, and gas dis/connection data by suburb and socioeconomic stratification could help inform this analysis and planning, reducing the uncertainty in future network requirements. Evoenergy could gain greater predictability in where the need for contingent projects is most likely to arise and prepare a range of scenarios.

10. Do you consider Evoenergy's opex proposal addresses the concerns of electricity consumers, as identified in the course of its engagement on the 2024–29 proposal?

It is clear that Evoenergy has considered consumer concerns, if not necessarily satisfying them all.

11. Do you consider Evoenergy's forecast opex for the 2024–29 period reasonably reflects the efficient costs of a prudent operator?

The basis for Evoenergy's proposed opex seems reasonable.

The Conservation Council notes that the forecast expenditure for "emergency response" has been increased for 2024-29 compared to actual expenditure in the previous and current periods, (Attachment 2, Figure 4) taking into account the potential for more frequent and larger-scale operational responses to extreme weather events caused by the warming climate, such as bushfires and thunderstorms. This is prudent, and the Council hopes that the same considerations for network resilience are also informing capex on network upgrades.

Storm-driven power outages are perceived to be becoming more frequent and longer in duration as climate change is increasing the intensity of weather events. This is highlighting the vulnerability of all-electric homes and is a genuine point of resistance to getting off gas. In our public engagement on making the switch, the Conservation Council frequently receives comments about "needing gas during blackouts" (notwithstanding the safety issues of operating gas appliances without electricity).

Faster response times, limiting of the affected extent of the network, and rapid restoration of power are critical to people's confidence in the electricity network's capacity to support all-electric homes. Designing the network into smaller zones that can be isolated in the event of damage could enable power to be restored to more homes more quickly. Portable batteries (shipping containers) could be brought into affected areas when connections to the grid are broken.

12. Do you consider Evoenergy's opex in its base year of 2021–22 as providing an efficient basis for forecast base opex for the 2024–29 period?

The past can no longer predict the future, but year-to-year the adjustments seem reasonable.

13. Do you support Evoenergy's distributed energy resource integration step change, and consider that it meets stakeholder expectations?

A step change for distributed energy resource integration seems necessary for providing a responsive and efficient network. Evoenergy must ensure that low-income households are not disadvantaged, as previously discussed.

14. Do you support the security of critical infrastructure step change, and consider that Evoenergy has provided a sufficient level of information to articulate the requirement to uplift its relevant security program?

This seems prudent given the recent cyber attacks on major Australian companies.

Incentive schemes and allowances

17. Do you consider applying the EBSS to Evoenergy again in the 2024–29 period would provide it a continuous incentive to reduce its opex?

Yes, likely. This scheme needs to be accompanied by confidence in the "fair sharing" between Evoenergy and network users.

Network pricing

23. Is there any adjustment to its TSS you think Evoenergy should make in order to mitigate its proposed capital expenditure?

The Council agrees that Evoenergy should incorporate the learnings from two-way tariff trials by other network operators, and that contingent tariff adjustments could be an appropriate response to address uncertainty.

As previously discussed, understand that tariffs are just one factor for households. Where low-income households do not respond "rationally" to pricing signals, Evoenergy should directly invest in rooftop solar, battery, smart metering and energy-efficient electric appliances as part of capital expenditure.

Tariffs must be carefully evaluated and adjusted so as to not disincentivise the uptake of rooftop solar PV and battery systems. Charging households to export to the grid is a major turnaround compared with the generous feed-in tariffs offered in the past. Households that install solar and batteries are doing the network a favour by reducing the requirement for new large-scale energy generation and storage. Resistance to export tariffs could be alleviated by providing education to households about how to set timers on household appliances and battery systems and utilise smart metering, to balance the benefits for households and the network.

The Council expects to see appropriate data collection and trend analysis in future plans.

24. Do you consider Evoenergy has demonstrated and supported its proposed contingency to assign electric vehicle owners to its demand tariff if its triggers are met?

It seems appropriate to apply time-of-use tariffs tiered by consumption to encourage EV owners to charge their vehicles (or home batteries) at off-peak times. However, customers should not be automatically assigned to a particular tariff structure without warning, education or an opt-out option.

As discussed above, this will need to be accompanied by targeted education to EV owners, perhaps in collaboration with the Australian Electric Vehicle Association, EV retailers and the ACT Government vehicle registrar, to help EV owners optimise their charging routines. Evoenergy should gather whatever data is needed to analyse the effectiveness of tariffs relative to other factors in households. Smart meters and "plain english" explanation of tariffs on electricity bills can help consumers identify the effects of their behaviours.

Rooftop solar and battery systems can help EV owners to limit their grid consumption and reduce the demand impact on the network.

25. Do you consider that sufficient justification has been provided in the provision of new services?

Yes.

Summary and Recommendations

Whilst appreciating that Evoenergy is a commercial entity supplying an essential service in compliance with AER rules, as a society we have an obligation to support our most vulnerable members and respond with appropriate urgency to the climate crisis.

Thus, the Conservation Council encourages the AER and Evoenergy to keep in mind the big picture of displacing fossil fuels from our energy system and ensuring a just transition. Investment in the electricity network must achieve the central objective of increasing network and customer resilience to climate change.

Evoenergy is prudent to have contingent mechanisms to monitor and respond to uncertainty, whilst also implementing measures to mitigate that uncertainty, such as a systemic approach to electrification and installation of community-scale batteries.

Tariffs must be monitored for equity impacts and perverse incentives on installation of rooftop solar and battery systems.

The Conservation Council strongly recommends at least one interim/mid-period review of this electricity network plan, noting that AER planning periods are not keeping abreast of the pace of climate and technological change. The ACT's 2045 net-zero target is only three more 5-year plans away after this period!