15 August 2023

Firstgas Group

42 Connett Road Bell Block New Plymouth 4312

Tim Sparks
Director, Network Pricing
Electricity Authority

Delivered via email to <a href="mailto:distribution.pricing@ea.govt.nz">distribution.pricing@ea.govt.nz</a>

Dear Tim,

#### **Targeted Reform of Distribution Pricing Issues Paper**

Firstgas Group (Firstgas) welcomes the opportunity to comment on the Electricity Authority (Authority's) Issues Paper *Targeted Reform of Distribution Pricing* released in July 2023. While we appreciate the extension of the submission date set by the Authority, alignment with the Commerce Commission (Commission) would be welcomed going forward as this submission was undertaken throughout the Input Methodologies (IM's) Review process.

This submission has been made on behalf of Firstlight Network (Firstlight), a part of Firstgas Group. For more information about Firstgas Group's businesses, refer to **Attachment 1.** 

Overall, we believe the current approach is working well. Firstlight has made great strides towards pricing reform and being ready for future technologies and potential disruptors and will continue to reform. We appreciate the Authority's recognition of making significant progress with pricing in conjunction with the Low User Fixed tariff getting phased out and the implementation of the new Transmission Pricing Methodology (TPM).

Firstlight looks forward to further evolving our pricing and look forward to continued guidance from the Authority. We believe that going forward, this can be achieved with minimal use of code amendments and excessive regulatory approaches.

Our detailed comments to the consultation questions are provided in **Attachment 2**. There is no confidential information in this submission.

Firstlight Network is a member of Electricity Networks Aotearoa (ENA). We support the ENA's submission.

### **Contact details**

Firstgas Group welcomes the opportunity to join the industry forum in September 2023 to discuss the issues paper, submissions and cross-submissions. If you have any questions on our submissions, please contact Nathan Astwood via email at <a href="mailto:nathan.astwood@firstgasgroup.co.nz">nathan.astwood@firstgasgroup.co.nz</a> or Tomas Kocar at <a href="mailto:tomas.kocar@firstlightnetwork.co.nz">tomas.kocar@firstlightnetwork.co.nz</a>.

Yours sincerely

Saba Malik

Regulatory and Policy Manager

### Attachment 1 About Firstgas Group

Our vision is to lead the delivery of New Zealand's energy in a changing world. Our mission is to safely and reliably deliver energy that's affordable and accessible to Kiwi families and businesses. We're proud of this and of the important role we play in Kiwis' lives.

Firstgas Group is an umbrella brand consisting of Rockgas, Firstgas, Firstlight Network, First Renewables, Flexgas and Gas Services NZ. Firstgas delivers natural gas to over 165,000 customers through a gas network of over 2,500 kilometres of high-pressure transmission pipeline and 4,800 kilometres of distribution pipeline in the North Island. Rockgas supplies LPG to 36 local suppliers and over 180 Refill and Save locations across New Zealand.

Firstlight Network is the electricity lines company for Tairāwhiti and Wairoa. Firstlight delivers electricity to more than 25,000 customers over a 12,000 square kilometre area.

Flexgas and Gas Services NZ are energy storage, operations and maintenance companies which make sure gas can be delivered safely and continuously. Flexgas operates the Ahuroa gas storage facility in central Taranaki. Gas Services NZ provides operational and maintenance support to all gas infrastructure owners, including the companies within Firstgas Group.<sup>1</sup>

New Zealand's homes have benefited from a choice of energy sources to meet their household needs. Currently there are over 400,000 homes in New Zealand which have natural gas and LPG. These homes predominantly use gas for cooking, instant hot water and heating. There are many benefits of having gas in the home. Natural gas is currently the most affordable way to heat water.<sup>2</sup> Gas boilers heat water so that it is instantly available. It requires no onsite storage in the home.

Firstgas is investigating opportunities for using our assets to help reduce New Zealand's carbon emissions. Our gas transmission and distribution networks cover much of the North Island and are ideally placed to support the development, transfer, and use of emerging fuels such as hydrogen and/or biogas.



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<sup>&</sup>lt;sup>1</sup> For more information about Firstgas Group, visit <u>www.firstgas.co.nz</u> , <u>www.firstlightnetwork.co.nz</u>, <u>www.rockgas.co.nz</u> , <u>www.flexgas.co.nz</u>

<sup>&</sup>lt;sup>2</sup> Home heating costs - Consumer NZ

### Attachment 2: Response to consultation questions

Question		Comment
Q1	Are there other options that you think the Authority should consider?	We feel that the continuation approach and the regular dialogue is working well.
		Firstlight has made progress with their roadmap implementation and this is reflected with the pricing scorecard results.
		Timing of the release of the pricing scorecards is important to make timely changes for the next pricing round.
Q2	Do you have any comments on the options outlined?	The continuation approach works well although more detailed guidance would be appreciated. Distribution pricing reform is still a work in progress and the Low User Fixed Charge (LFC) is still a key factor until it is finally phased out.
		Alternative approaches seem heavy-handed and could further delay progress with pricing.
Q3A	Do you agree that a combination of TOU tariffs and load control (appliance) tariffs would be useful for the smart management of peak demand?	Partially agree. While the combination of Time-of-Use (ToU) tariffs and load control can contribute to smart management of peak demand, it is important to note that these strategies might not be fully effective in isolation; precisely without consideration of price elasticity of demand, demand response diversity, consumer energy literacy level and behaviour challenges, technological limitations, equity and affordability concerns, etc., their effectiveness could be limited.
		ToU tariffs and load control mechanisms can be valuable components within a broader suite of mechanisms for comprehensive peak demand management. Nevertheless, they should not be viewed as standalone solutions. While they can play a significant role, they cannot solely address the complexities of peak demand.
		There is no 'one size fits all solution' that can address all the complexities and requirements of peak demand management through ToU prices. ToU price implementation requires consideration given to monitoring network conditions, demand response programs to support a gradual load shift and investment in smart grid technologies to manage and balance loads.
		In conclusion, a multifaceted approach, tailored based on the network characteristics and designed to meet customer demand and expectations, and encompassing ToU tariffs and load control alongside other measures — such as making efforts to increase consumer energy literacy levels, addressing consumer behaviours, developing energy storage systems, utilising demand response diversity, and promoting energy-efficient technologies — is essential for achieving robust and sustainable peak demand management.

Question		Comment
Q3B	Do you consider that TOU pricing could have unintended consequences for congestion on the LV network?	Yes, but the unintended consequences associated with static ToU pricing typically arise when the pricing strategy is effective in prompting significant changes in consumer behaviour. The transition of energy-intensive activities to off-peak periods prompted by static ToU pricing can result in sudden spikes of demand during those times, potentially straining the LV network's capacity, and creating another peak (or peaks) outside the usual peak-period. The demand concentration outside the peak-periods may cause voltage fluctuations, equipment damage, overload transformers, and compromise network stability.  Uneven distribution of demand is also a potential consequence of static ToU tariffs, causing bottlenecks and congestion during specific times, while other parts of the day might have excess capacity. The off-peak energy consumption surge could necessitate costly and time-consuming infrastructure upgrades, disrupting the balance between peak and off-peak demand.  Moreover, static ToU pricing might disrupt the consistent energy flow from distributed energy resources, like solar panels, leading to unintended surges in energy injection during off-peak hours that networks might not be designed to handle.
Q3C	Do you consider that use of shoulder pricing as part of the TOU price structure could be an effective way to mitigate this risk? What other ways could be effective?	Theoretically, yes – Incorporating shoulder pricing or introducing a middle tier between peak and off-peak hours can potentially help to mitigate the risk of demand concentration during off-peak periods and can contribute to a more balanced load profile, reducing the extreme demand spikes that could strain the distribution network. However, it doesn't mean that it should work for every network, as the load profiles for the networks vary.  Several other modern strategies, e.g., critical-peak pricing, peak-time rebates, smart appliances integration, and effective DER integration can also be effective and can contribute to a more resilient and balanced energy consumption pattern while maintaining the distribution network stability.  Moreover, increasing energy literacy and awareness, and real-time feedback to consumers on their energy usage can empower consumers to make informed decisions about when to use energy-intensive appliances, and can encourage mindful energy consumption pattern.

Question		Comment
Q4	Do you agree with the assessment of the current situation and context for peak period pricing signals? What if any other significant factors should the Authority be considering?	The issues paper <sup>3</sup> notes inconsistency within a distributor's tariffs between implied LRMC and values signalled through peak/off-peak differentials and values signalled through control discounts.
		It is important to note that LRMC is typically signalled through peak/off-peak (ToU) pricing rather than controlled/uncontrolled load. Peak/off-peak (ToU) pricing is used to signal LRMC and reflects the varying costs of distributing electricity at different times of the day while also considering factors such as demand, supply availability, and network congestion to determine higher prices during peak demand periods and lower prices during off-peak times. LRMC is influenced by factors such as infrastructure investments, demand growth, operational efficiencies, technological advancements, etc. and aligns more with the overall cost structure of providing distribution services over the long term.
		Controlled/uncontrolled load, on the other hand, typically refers to load management strategies where certain appliances (e.g., water heaters, EV chargers) or loads can be remotely controlled or adjusted by the distributors to manage short-term congestion or for demand response purposes. If it has to signal LRMC, then a higher factor should be applied because it is a more certain control for the network.
Q5	Do you agree with the problem statement for peak period pricing signals?	The problem statements appear to have a negative bias, assuming a lack of potential progress without acknowledging advancements and efforts being made by the distributors
		Establishing pricing signals that effectively reward flexibility requires a strategic approach that aligns with consumer demand, consumer behaviour/response, market dynamics, and technological capabilities. It should be acknowledged that the industry is making progress and taking steps which is reflected through the wider acceptance and application of ToU pricing, fast deployment of smart meters, participation in demand response programs, flexible pricing structures and most importantly consumer engagement to understand consumer preferences.
		Rationale for the differential between controlled and uncontrolled tariffs not being tied to LRMC has been explained in the paragraph above. The difference between controlled/uncontrolled load is typically based on cost-benefit analysis, hence the differential can be higher than LRMC.
Q6	Do you have any comments on the Authority's preferred pricing for peak periods?	While the Authority's preferred approach holds some promise, it is essential to recognise that distributors navigating this intricate pricing structure require robust guidance and active engagement. While the approach seeks to align pricing with actual costs, the complexities involved in accurately charging these costs for diverse consumer groups, and its impacts on the health and welfare of the consumers can pose challenges.
		Implementing cost-reflective pricing without considering the welfare of consumers can have negative consequences. A truly cost-reflective price might disproportionately affect vulnerable or low-income households, leading to energy poverty and compromising basic needs. Energy is a necessity, and drastic price changes can impact health, well-being, and overall quality of life for some individuals and families.

<sup>3 &</sup>lt;u>Issues Paper - Target reform of Distribution Pricing</u> para 4.21

Questi	on	Comment
Q7	Are there other options you think the Authority should consider for improving peak period pricing?	Distributors would require clear guidance from the Authority, along with support in comprehending the Authority's preferred LRMC models and methodologies, their application, and the potential impacts on consumer welfare.  Engaging distributors through educational initiatives, workshops, and accessible resources can empower them to make informed decisions, optimise their strategies, and navigate the complexities of the pricing system, ultimately contributing to a more successful and harmonised implementation of the authority's preferred approach.
Q8	Which if any of the above options do you consider would best support distribution pricing reform around peak pricing signals and why?	We propose that the Authority works with ENA and the Distribution Pricing and Regulatory working groups to explore further options.  We also propose that the Authority collaborates with the distributors to explore options that align with the network's requirements and meet their consumers' needs.
Q9	Do you agree with the assessment of the current situation and context for offpeak pricing signals? What if any other significant factors should the Authority be considering?	The issues paper <sup>4</sup> notes that LFC rules restrict fixed charges for homes, so distributors might increase off-peak fees or raise peak and off-peak rates to maintain the cost difference and allocating less revenue to residential consumers can help avoid this.  Allocating less revenue to residential consumers contradicts the Authority's approach to achieving cost-reflective pricing. The principle of cost reflection aims to ensure that each consumer group pays for the actual costs associated with providing electricity services. If residential consumers are charged less than the actual costs, the question arises as to which consumer group should bear the additional burden or cross-subsidise. In such cases, the cost burden could shift to other consumer groups, potentially leading to unfair pricing and distributional imbalances.  The issues paper <sup>5</sup> also notes that many distributors apply fixed, capacity-based, charges to commercial consumers of varying sizes by allocating consumers to relatively narrow capacity bands or by applying a \$/kVa charge to a measure of installed capacity.  It is important to note that approach aligns with the principle of cost recovery, as consumers with higher capacity connections typically place a greater strain on the distribution network infrastructure. By charging higher daily fixed charge for higher kVA capacity groups, the pricing structure more accurately reflects the actual costs associated with maintaining and expanding the network to accommodate increased demand. It also incentivises consumers to consider their capacity needs carefully, potentially leading to more efficient utilisation of resources.
Q10	Do you agree with the problem statement for off-peak pricing signals?	The problem statement appears to ignore the fact that network costs can arise from various factors, including infrastructure maintenance, distribution losses, faults restoration, which could be impacted by off-peak usage patterns.
Q11	Do you have any comments on the Authority's preferred pricing for off-peak usage?	No comments

<sup>4 &</sup>lt;u>Issues Paper - Target reform of Distribution Pricing</u> para 5.10

Questi	on	Comment
Q12	Are there other options you think the Authority should consider for improving offpeak pricing?	Option b, which involves extending the practice note and scorecards to address off-peak price signals, has the potential to contribute to achieving the desired results. Enhancing this approach could offer significant clarity and definitiveness. Refining the Authority's guidance in this domain could present more explicit and straightforward directives, thereby aiding in the efficient management of off-peak price signals by the distributors.
Q13	Which if any of the above options do you consider would best support distribution pricing reform around off-peak pricing signals and why?	We propose that the Authority collaborates with the distributors to explore options that align with the network's requirements and meet their consumers' needs.
Q14	Do you agree with the assessment of the current situation and context for target revenue allocation? What if any other significant factors should the Authority be considering?	Agree with the assessment
Q15	Do you agree with the problem statement for target revenue allocation?	Disagree that target revenue allocation is a major concern, as stated in the issues paper, this is a relatively new area of focus for the Authority. We seek clear guidance from the Authority on what it sees as the most efficient method of target revenue allocation.  More clear guidance would be welcomed from the Authority on their preferred subsidy free calculation.
Q16	Do you have any comments on the Authority's preferred pricing?	We look forward to seeing the Authority's view on what a consistent and efficient approach to Target Revenue allocation looks like.  It would be appreciated if the subsidy-free approach has a wide range of approaches across the EDB's, to seek the Authority's preferred approach. Workable examples would also be appreciated.
Q17	Are there other options you think the Authority should consider for improving target revenue allocation?	No other options to add
Q18	Which if any of the above options do you consider would best support distribution pricing reform around targeted revenue allocation?	Options a and b are preferred. The issues paper has added food for thought for EDB's and will encourage Firstlight to delve further into any issues as well as address any findings from the latest pricing scorecard. Extending the practice note and scorecards could cover more detailed guidance from the Authority
Q19	Do you agree with the assessment of the current situation and context for connection pricing? What if any other significant factors should the Authority be considering?	A recent survey by the ENA has demonstrated the varying approaches by different EDBs to their capital contributions policies.  There are still many small networks that require 100% contribution to any assets upgrades or new assets required to connect or upgrade a connection.  Figure 6 does not factor in vested assets, which with many networks are standard approach to connecting to the network or upgrading their connection.

Question		Comment
Q20	Do you agree with the problem statement for connection pricing?	Agree with the Authority's view where there is lack of standardisation, however that does not mean lack of cost reflectivity or lack of pricing efficiency.
		100% contribution to additional costs required to connect a customer or upgrade a connection seem like an efficient and fair approach and ensure that access seekers factor these costs into their business cases.
		In addition to the listed problems, there's also an issue with possible IRIS penalties if EDBs contribute to their connections and new connections and upgrades are above forecast.
Q21	Do you agree with the Authority's preferred pricing approach for connection charges?	Firstlight Network is very wary of the possible equity issue that would result from subsidising new connections and upgrades.
		While we are considering changes to our capital contributions policy, we appreciate official guidance by the Authority or the ENA in order to avoid introducing a policy and changing it a year later.
		It would be beneficial to introduce standard terminology and standard formulae for calculations, however the level of contribution may need to stay network specific due to funding issues depending on ownership.
		While encouraging electrification of NZ is a noble cause, EDBs have to be careful about not giving preferential treatment based on connection type.
		Fully fixed charges seem to go directly against cost reflectivity principles the Authority sets.
		Consistency on subsidy free range approaches would be a great outcome for consumers.
Q22	Do you have any thoughts on the complementary measures mentioned above and to what extent work on these issues could lead to more efficient outcomes for access seekers?	Providing information on asset location and publishing congested parts of the network could be beneficial to some customers.
		It would be worth exploring the appetite of such information through a customer survey. Introducing further cost into networks' cost base without certainty of utilisation would be undesirable for the consumers.
		Firstlight Network publishes network approved contractors on our website and assess seekers are free to engage any of those to help with connections and upgrades.
Q23	Are there other options you think the Authority should consider for connection pricing?	The Authority published connection pricing toolkit, e.g., recommended NPV calculations, recommended subsidy free range calculation etc.
		Any deviation from the recommended calculation would have to be explained in the Pricing Methodology. This would ensure approach consistency across the EDBs.
Q24	Which if any of the above options do you consider would best support distribution pricing reform in the area of connection pricing?	While extending practice notes and providing recommended calculations for connections charges to ensure consistent approach would sound least disruptive.

Question		Comment
Q25A	Do you agree with the assessment of the current situation and context for retailer response? What if any other significant factors should the Authority be considering?	Agree with the context. The retailer response is important. Understanding consumer preference is also important to developing pricing. It would be welcomed to understand the proportion of ICP's on non-uniform prices.
Q25C	[for distributors]: What plans do you have to increase the proportion of your customers that face time-varying charges (for example, making TOU plans mandatory for retailers whose end-users have an AMI meter installed)?	Firstlight introduced mandatory mass market ToU plans in 2021. However, there is still a high proportion of ICPs for which some retailers claim exemptions on the basis of inadequate systems.  We will address these exemptions with the relevant retailers during the next set of trader meetings.
Q26	Do you agree with the problem statement for retailer response?	It is acknowledged that the use of deemed profiles is an issue. The Authority should address the and impose a phasing out of their use.
Q27A	Do you have any comments on the Authority's preferred pricing?	Agree with the preferred approach.
Q28	Are there other options you think the Authority should consider for retailer response?	No other options to add. Welcome the Authority's option to monitor retail pricing. Feel this is an important step to any pricing reform
Q29	Which if any of the above options do you consider would best support distribution pricing reform in the area of retailer response?	The preferred options outlined in paragraph 8.23 would best support pricing reform. This approach will encourage continued improvement and collaboration between Firstlight and the Authority.