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To: Electricity Authority Te Mana Hiko

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## Subject: Submission on Distributed Generation Pricing Principles Consultation – Advocating for the Removal of Cross-Subsidisation and Economic Inefficiencies

### Tēnā koutou katoa

Helios Energy welcomes the opportunity to provide feedback on the consultation regarding the Distributed Generation Pricing Principles (DGPPs). As a developer of grid-connected generation, we strongly support the removal of any cross-subsidisation and economic inefficiencies that could arise from different pricing principles, rules or standards between grid-connected and distributed generation. Our position is based on the principle that all generation options should compete on a level playing field, ensuring efficient investment and least-cost electricity supply for consumers.

Helios supports the overhaul of DGPP pricing principles. Helios foresees an energy sector with significantly more generation at both grid and distributed scales, in which many networks may host considerable amounts of Distributed Generation. This will likely see networks transition from import or net consumption-based, to being balanced (in energy terms) or even export-based. Pricing principles, in particular the recovery of sunk investment costs, should not be designed to discriminate whether an electron is being injected into or out of the distributed network. Current pricing principles do not do this and result in grid-connected generators paying a very large proportion of all upstream network costs, with distributed generators paying only incremental costs incurred.

Helios is supportive of all forms of distributed generation, whether it be rooftop or behind the meter, embedded or distribution connected, or grid scale. All forms will be required to accelerate New Zealand's transition to Net Zero. However, distortions in pricing can create material free-rider benefits and pricing signals that result in projects being implemented in the wrong place at the wrong time, increasing costs to consumers through inefficient pricing signals or the ability to avoid costs. This is foreseeable, a small but growing issue, and the time is right for the Electricity Authority to establish clear pricing principles that are future focussed and provide the level playing field that investors are looking for.

Helios have anecdotally observed a number of smaller scale projects entering the market with what we would expect to be materially higher LCOE's, suggesting that pricing inefficiencies may be encouraging investors to actively develop distributed rather than grid connected projects.

### 1. The Need for Cost-Reflective Pricing

The current DGPP framework, which limits charges to incremental costs and prevents distributed generators from contributing to common network costs, creates economic distortions. Specifically:

- **First-Mover Disadvantage**: The incremental cost approach discourages efficient infrastructure investment by penalising early investors who bear a disproportionate share of costs.
- Unfair Cost Burden on Grid-Scale Generators: Grid-connected generators pay for shared network costs, while distributed generators largely avoid them, leading to a competitive imbalance. This risks incentivising distributed generation with consumers and other network users paying for an unreasonable proportion of network costs



• **Inefficient Investment Signals**: The framework may incentivise excessive investment in distributed generation over grid-scale alternatives, despite potential inefficiencies in transmission and distribution asset utilisation.

### 2. Supporting Market-Based and Efficient Solutions

We support the Electricity Authority's preferred approach of a comprehensive overhaul of DGPPs, particularly:

- **Removal of the Incremental Cost Limit**: This would allow distributors to allocate costs more fairly and ensure all generators contribute appropriately to network usage
- Elimination of Cross-Subsidisation: Ensuring that costs are borne by those who benefit from distributed generation, rather than shifting burdens to other market participants.
- **Market-Driven Investment Frameworks**: Encouraging contracting and competitive pricing mechanisms rather than prescriptive regulatory constraints, fostering innovation and efficiency.

### 3. Ensuring Long-Term Consumer Benefits

An efficient pricing structure will:

- Encourage investment in the most cost-effective generation options.
- Prevent unnecessary network expansion due to inefficient distributed generation placement.
- Promote transparency and fairness in network pricing, reducing the risk of regulatory distortions.

### Conclusion

Helios Energy strongly urges the Authority to implement a pricing framework that reflects actual network costs, removes artificial advantages for distributed generation, and ensures that all generation technologies compete fairly. We support a transition towards market-based solutions and cost-reflective price signals that optimise investment across the electricity sector.

We appreciate the opportunity to contribute to this consultation and look forward to continued engagement to refine and implement a more equitable pricing regime.

Thank you for the opportunity to provide feedback on this important issue.

Nāku noa, nā



Jeff Schlichting Managing Director



### **Appendix: Responses to Consultation Questions**

Q1. Do you have a view on the definition of incremental cost that is contained in the Code? Should it be more tightly defined to include only network costs and to exclude consequential costs relating to factors such as frequency keeping and voltage support? Would this lead to more timely generation build and lower energy costs?

Helios Energy believes that the definition of incremental cost should be more tightly defined to ensure consistency and fairness in cost allocation and to avoid different pricing practices across EDB's. Ancillary service costs are of a magnitude that are material, but are unlikely to make or break investment decisions. They should be expressly included in the Code definition and charged to distributed generators.

## Q2. Do you agree with the problems with the incremental cost limit identified in this section? Why or why not? Do you have a view on the relative importance of the problems identified?

Yes, we agree with the problems outlined. The incremental cost limit distorts investment decisions by artificially favouring distributed generation and imposing unfair cost burdens on grid-scale generators and consequently on consumers. Among the identified issues, the most pressing concerns are first-mover disadvantage and the inability of distributors to recover shared network costs fairly. Addressing these inefficiencies is critical for ensuring a competitive electricity market.

Helios notes the growing number of distribution-connected solar projects, which may be a sign that investment signals currently encourage distributed generation over grid-connected generation. The benefits to consumers (through lower prices) don't necessarily outweigh the implicit cost avoidance or compensate for under-investment in the transmission grid.

## Q3. Do you agree circumstances have changed significantly since the DGPPs were introduced, including that there are now far fewer impediments to DG than in the early 2000s?

Yes, the energy landscape has changed considerably. Technological advancements, declining costs of renewable generation, and increased grid capacity mean that the original justifications for DGPPs—such as removing barriers to DG—are no longer fit for purpose. Instead, DG is now a viable participant in the market, and the pricing principles must be updated to reflect current realities.

# Q4. Do you agree with the assessment of the current situation and implications of incremental cost pricing? If not, why not? What, if any, other significant factors should the Authority be considering?

Yes, as outlined above, Helios agrees with current challenges described in the consultation document.

### Q5. Do you agree these are the appropriate options to consider?

Yes, the four proposed options are comprehensive. We strongly support Option 4 (comprehensive overhaul), as it presents the best pathway toward efficient, market-based pricing.

## Q6. Are there other options the Authority should consider for improving rules about costs that can be recovered from distributed generators?



A phased approach to transitioning from DGPPs to fully market-based pricing could be considered to mitigate short-term disruptions while achieving long-term efficiency gains.

### Q7. Will new aggregator business models emerge to solve the problem?

While new business models may emerge, regulatory clarity and efficiency in cost allocation are still necessary to avoid market distortions. The pricing framework should not rely on aggregators as a primary mechanism for resolving inefficiencies, particularly in light of the current market share controlled by incumbents.

### Q8. Are distribution price signals alternative to, or complementary to, contracting?

They are complementary. Efficient price signals should guide investment decisions, while contracts provide a mechanism for negotiating specific arrangements tailored to local network conditions.

## Q9. Which, if any, of the above options do you consider would best support efficient pricing for recovery of distribution costs from DG?

Option 4 (comprehensive overhaul) is the approach Helios considers most effective, as it provides flexibility while ensuring cost reflectivity and fairness.

### Q10. Do you agree with the Authority's tentative view on a solution?

Yes, we agree that a revised set of pricing principles should send efficient signals. These pricing principles should be sufficiently prescriptive to ensure that similar distributors with similar connection use-cases apply a similar approach or reach a similar pricing outcome. It is neither equitable nor desirable to have a high level of differentiation for DG connections by network, causing inequitable outcomes and high transaction costs.

Codifying them within the Code would provide the necessary regulatory certainty and enforceability.

### Q11. Are there any unintended consequences from removing the existing DGPPs?

The key risk is short-term uncertainty for distributed generators; however, this can be mitigated through a well-managed transition strategy and clear guidance from the Authority.

## Q12. Do you agree market and regulatory settings provide efficient incentives for DG reducing or avoiding transmission costs?

Yes, but further refinement of price signals may be needed to ensure DG is appropriately incentivised without distorting market competition.