



Distributed Generation Pricing Policy: Presentation to EA

3 April 2025

**LODESTONE ENERGY**

Effective DGPP will deliver:



“Solar Farm in Every Community” model is the lowest cost for consumers



3 MWh of BESS for every MW of solar (in every community)



Nodal prices will reduce, and network expansions will be minimised



Solar and BESS can replace thermal generation



We see 5,000 to 7,000 GWh of solar and BESS



Aside from nodal price effect, solar/BESS should be same price everywhere



Solar is <10c per W; likely the lowest cost of electricity into the future



Batteries are <100 per MWh and likely to be coming down



The rules should allow all consumers to have equal price and opportunity



Simple, repeatable, stable will be the best policy



Utility-scale DG within a network provides an inherent benefit



DG should never pay for unrecoverable T&D costs



Micro-DG should have symmetrical TOU pricing on exports



TOU pricing (Day, Evening Night) should be consistent across NZ

Inherent benefits of DG



Meets new demand within a network, at a low incremental cost



Improve security of supply, particularly when combined with BESS



Lowers nodal prices (line losses) benefit everyone



Reduce future capital network expansions, benefits everyone



Remove carbon and gas from wholesale market



DG options maintain competitive pressure Gentailers

Clause 2, Schedule 6.4 of Code



Safe to assume there is a net benefit to consumers



Incremental costs is the right approach



Any other costs is a 'common good'; paid for through inherent benefit



TPM should also exempt embedded DG (of any size)



Therefore: simple solution is DG pays incremental costs only



Connection charges: set the same as loads to increase revenue base

Question 1 and 2



Improve definition to be clear statement of 'incremental costs only'



Explicitly exclude frequency keeping, harmonics & voltage support



These costs are a 'common good' as it invites more DG



To the extent BESS is a load, TOU load charges should apply

Question 3 and 4



We think the original thoughts on benefits were accurate



A clear and specific definition of connection costs is best approach

Question 5, 6, 7, 8, and 9



Mandated TOU pricing and symmetrical energy value on exports



Distribution companies can manage TOU to get full recovery



Distribution companies do not need to consider rebates with TOU



No need for anything too complex with TOU – simple, repeatable, stable



Allows for demand side participation and avoid peak period

Question 10, 11 and 12



Force Transmission, Distribution and Retail to provide TOU



Force Retail to flow through TOU from Transpower and Distributors



Force Retail to provide export credit prices that equal TOU energy prices



Require smart meters



Level Playing Field: Generator selling to independents at same prices



Mandate Gentalers to market making for 'peak period' futures

Question 10, 11 and 12



Exempt Solar and Batteries from TPM BC allocations



Require TOU from Transpower and Distributors



Match DG connection charges to large load connection charges



AC-connected Batteries are a Load; DC-connected batteries are not



Mandate a non-discriminatory constraints management regime



DG pay for all connection costs and incremental maintenance costs (only)

Summary



Clarify incremental costs only



Exclude collateral network costs - all an exchange for the DG benefit



Exempt DG from TPM across the board



TOU for T, D and Retail with symmetrical pricing on exports for micro-DG



Connection charges: set the same as loads (TOU)



Keep it very simple, not dynamic, repeatable, predictable, stable



Simple means: Day, Evening (peak) and night pricing across all networks



Connection charges: set the same as loads to increase revenue base

We believe a universal, simple, consistent approach across all networks is achievable and desired, to maximise micro-DG and utility-scale DG.

A TOU based, incremental cost recovery methodology delivers the benefits to all consumers and should work within any network. A DG in Auckland should have a similar opportunity to a DG in Cromwell.

For most years, this regime for DG will be able to offset thermal generation and reduce the wholesale price through elimination of carbon, coal and gas.



Sheep grazing at Northland A – Kaitia Solar Farm