



Transmission pricing methodology (TPM) reform

Improving transmission pricing for the benefit of all New Zealanders

April 2022

Bringing the reform process to a close

- TPM reform has been contentious
 - All agree TPM reform process needs to end
 - Strong differing views on solution; significant financial interests; no international consensus
- After a decade of analysis and sector engagement, Authority sets direction of TPM reform through new 2020 TPM guidelines
- Transpower then developed a proposed new TPM
- Authority consulted with stakeholders → final decision on 31 March 2022
- Transpower must set prices under the new TPM in late 2022 for 1 April 2023













Why transmission pricing matters

- Impacts on the use of the grid, and investments in the electricity system (transmission, generation, batteries)
- More efficient transmission pricing → better use of the grid; the right investments being made in the right place at the right time
- Particularly important in context of transition to a low-emissions economy:
 - Electricity demand estimated to increase by 68% by 2050; driven by electrification of process heat and transport
 - More demand = more investment, especially in renewable generation
 - Transmission pricing affects whether transition occurs on lower or higher cost pathway (resulting in lower or higher electricity prices for consumers)













The current TPM is not fit for purpose

- Creates a range of distortions:
 - Discourages consumption at peak times (even when no congestion)
 - Encourages 'cost shifting' behaviour (pushing transmission costs on to other consumers)
 - Increasingly volatile: year on year cost uncertainty
 - Unjustified tax on South Island generation
 - Smears charges across the country; risk of over-investment in transmission
- Current TPM charges don't reflect cost of delivering electricity; benefits consumers and generators receive from transmission investments
- Consequences will get worse as New Zealand electrifies













Key features of the new TPM

- Benefit-based charge heart of the new TPM
- Connection charge
- Residual charge
- Prudent discount
- Price cap
- Works with wholesale electricity nodal prices, which signal congestion













Key policy decisions since the October 2021 consultation

- Grid asset classification
 - Appeal rights re asset reclassifications
- Connection charges
 - FMD anticipatory capacity
- Benefit-based charges
 - Simple method generation:load weighting
 - Counterfactual demand forecasts













Key policy decisions since the October 2021 consultation

- Residual charge
 - Measuring AMD for multiple points of connection at the same location
 - Treatment of batteries
- Prudent discount policy
 - Manual requirements / backdating for those who apply shortly after commencement
- Commencement date
- Predictability of future charges













The new TPM delivers

- Stable, robust and more efficient transmission pricing
- Lower prices for delivered electricity including reduced cost of electricity at peak times when people want to use it most
- Long term benefits an estimated net benefit to New Zealanders of approximately \$1.8 billion over the next 28 years
- Promotes the right investment (in the right place at the right time) in renewable generation and electrification of process heat, contributing to New Zealand's low-emissions transition at the least cost













Impact on household bills

- TPM will lead to lower electricity costs over time, but initially rebalances Transpower's charges:
 - Some charges will increase, some will decrease
 - Capped at 3.5% increase in total electricity costs + inflation (19/20 base year)
- Households in areas served by local lines companies that pay less in transmission charges: typical annual household electricity bills reduce on average by around \$18
- Households in areas served by local lines companies that pay more: typical annual household electricity bills increase on average by around \$12
- Energy retailers can choose to pass any changes on or not







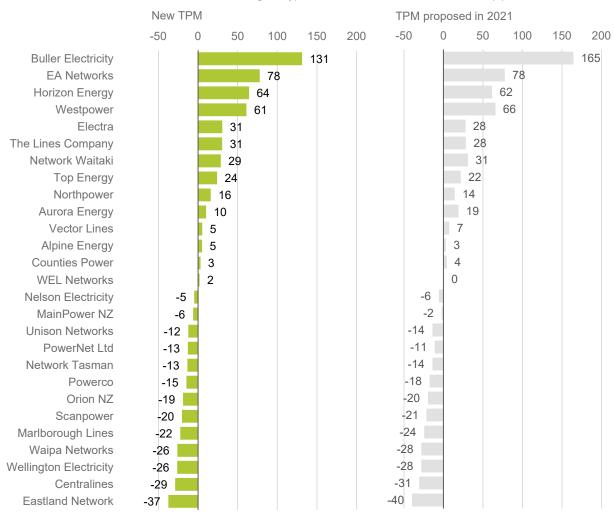






Impact on household bills





Indicative comparison (against the current TPM) of the household bill impact in the 2021/22 pricing year.













Impact on household bills – four largest increases

- Buller Electricity: increased charges significantly driven by a proposed asset reclassification by Transpower, so comparison between current and new is not like-for-like
- Buller, Horizon Energy, Westpower, EA Networks: very volatile transmission charges under the current TPM, so any impact assessment very sensitive to year of comparison
- Like for like, new TPM charges for *EA Networks*, *Horizon Energy* and *Westpower* are lower than indicated in the 2020 TPM Guidelines decision, ie, changes well signalled over a number of years
- Reduced ACOT payments likely to mitigate impact for Westpower, Horizon, and others













Next steps - Authority

- Upcoming related consultations:
 - Gross energy data; existing PDAs/NEA
 - SRAM
 - ACOT
 - Re-openers













Next steps - Transpower

Next steps for implementing a new TPM

Transpower has an extensive programme of work to implement the new TPM into prices that will take effect from 1 April 2023.

As part of that work, we will be running several consultations with customers as soon as practicable.

Some of our next key steps include:

- Publishing an indicative pricing update, reflecting pricing under the new TPM as if it had been applied for April 2022/23
 prices. We plan to publish this update later in April (outside of market hours).
- Consulting on a draft Assumptions Book for benefit-based charges (BBCs), which will outline how Transpower will
 operationally implement the BBC components of the new TPM, from late April.
- Consulting on the proposed cost allocations for two committed benefit-based investments (BBIs) commissioning this year
 —Clutha Upper Waitaki Lines Project (CUWLP) from late April, and Otahuhu-Whakamaru A and B Lines Reconductoring
 Project (OTA-WKM) from mid to late May.













Questions



