Media Briefing

Decisions regarding distributed generation

6 December 2016

COMPETITION • RELIABILITY • EFFICIENCY

Background: what are the DGs, DGPPs and ACOT?

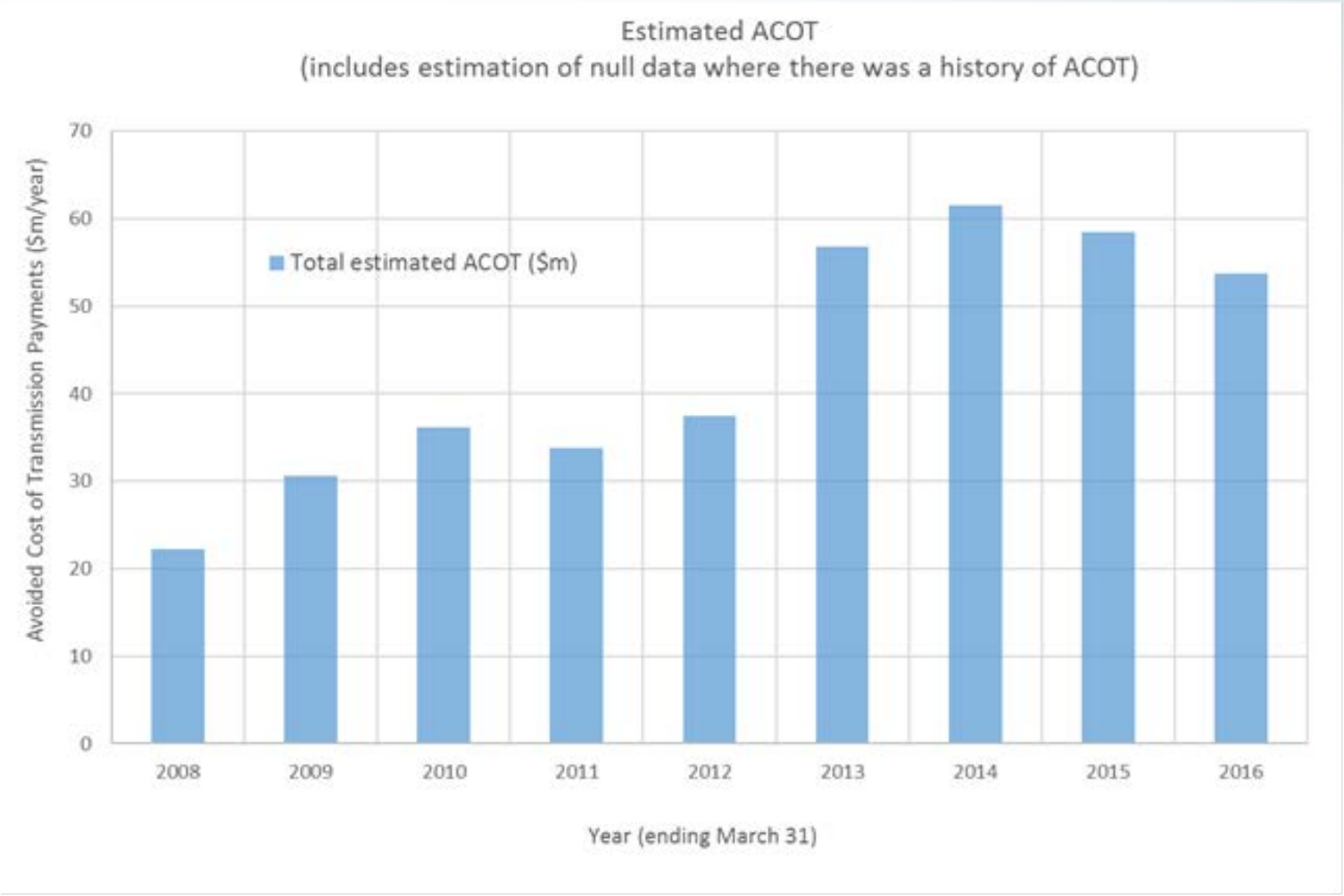
- Distributed generators (DGs) are generators connected to a local electricity distribution network, rather than to the national grid
  - Like other generators, DGs earn revenue from supplying electricity to the wholesale electricity market

- The Distributed Generation Pricing Principles (DGPPs) are default rules that require distributors to
  - Make special side-payments to DGs---called Avoided Cost of Transmission (ACOT) payments---when DGs avoid transmission charges (not transmission costs)
  - Charge DGs for using their network at no more than the incremental cost of connection---this is called the regulated price ceiling

Current ACOT rules create perverse results

- The current ACOT rules mean distributors pay for DGs that don't avoid transmission costs for consumers
- The $5 billion spent on upgrading the national grid means we need DG less, but perversely the ACOT rate increases due to current ACOT rules
  - The ACOT rate has increased 79% over the last eight years
- The current ACOT rules encourage DG to be built in the wrong location, where perversely it actually adds to future transmission costs
- The current ACOT rules lead to higher prices for consumers, costing them up to $297 million (in present value terms)

ACOT payments have grown rapidly since 2008



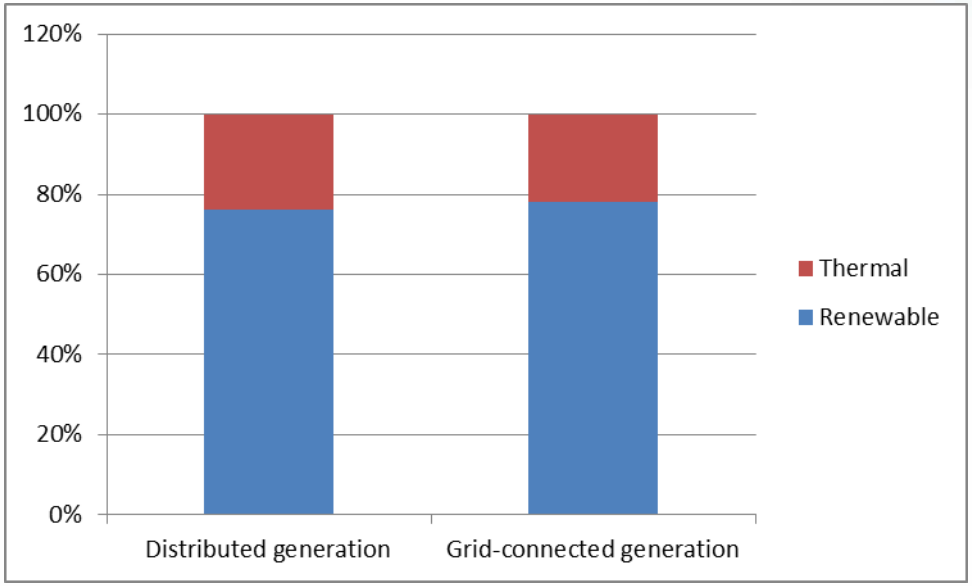
Decision: we're removing ACOT payments that don't reduce grid costs

- For existing DGs
  - Distributors will pay ACOT only to DGs on an approved list published by the Authority
  - The new ACOT arrangements will be introduced in four phases
    - From 1 April 2018: DGs in the lower South Island (LSI) may not be on the list and so lose ACOT payments
    - From 1 Oct 2018: ditto for DGs in the lower North Island (LNI)
    - From 1 April 2019: ditto for DGs in the upper North Island (UNI)
    - From 1 Oct 2019: ditto for DGs in the upper South Island (USI)
- For new DGs
  - Transpower can pay any new DG that genuinely avoids transmission costs (they will not receive ACOT from distributors)

Our decision will not impact on the environment or reliability

- We don't expect many (if any) DGs to shut down as a result of the proposal
- DG is not significantly more renewable than grid-connected generation

Proportion of generation renewable and thermal



- 95% of new grid-connected and distributed generation proposals are for renewable generators
  - So generation entering the market in future will be mostly renewable, regardless of our proposal

Further background

Some misconceptions about the ACOT changes

Misconceptions	The Authority's response
Removing ACOT is bad for consumers	• The decision transfers up to $297m to consumers from owners of DG
40% of DG will shut down	• We expect only around 6% of existing DG capacity (high-cost diesels) to close • The 40% figure is a misunderstanding of one of our CBA assumptions
Damages reliability of supply	• Not true: DGs that provide reliability benefits will keep receiving payments • To be extra prudent about reliability we are phasing in the new ACOT approach • Transpower is free to contract with DGs to support the grid if that is the lowest cost option for consumers
Rushed decision without proper consultation	• By 1 April 2018, the issue will have been 'on the table' for nearly five years • We have repeatedly signalled our intention to review ACOT since 2013 • Our May consultation period was for 10 weeks (6 weeks is usual)

Some misconceptions about the ACOT changes, continued

Misconceptions	The Authority's response
Increases carbon emissions	• Not true: this decision could close diesel DGs, improving carbon emissions • New generation will be low-emissions as 95% of resource consents for potential new generation capacity is low-emissions
Harms regional economies	• Not true: as very few DG will cease operations in our view • Grid-connected generation is typically located in the regions too, and no impact on regional economic growth if DGs displaced by grid-connected generation
Changing these well-established 'rules' will chill investment in the sector	• Not true: four generators are now considering significant further investment • Many DG owners say they never included ACOT in their business case • There has been no long-standing regulatory policy on ACOT payments to DG • How could they reasonably expect the ACOT subsidy to continue when it leads to such poor (and perverse) outcomes for consumers

More detail on why current ACOT rules create perverse results

- Current ACOT rules mean distributors pay for DGs that don't avoid transmission costs for consumers
  - This means consumers are subsidising owners of those DGs
- The rate of subsidy has increased 79% over the last 8 years
  - The purpose of the ACOT payments is to avoid or defer the need to build more transmission capacity
  - But, perversely, the more transmission capacity we have the higher the ACOT subsidy rate to DG
  - The $5 billion spent on grid upgrades has driven the subsidy rate up from $63,740 per unit to $114,640 per unit
- The ACOT subsidy causes a waste of resources valued at up to $33m (in present value terms)
  - Eg, encouraging DG plant to be built when it is costly to do so
  - Eg, encouraging DG to be built in the wrong location, where perversely it actually adds to transmission costs (which further increases the subsidy rates for ACOT)
- This leads to higher prices for consumers
  - The higher prices paid by consumers is costing them $35m - $297m (in present value terms)

Decision: we're removing ACOT payments that don't reduce grid costs

- For existing DGs
  - Distributors will pay ACOT only to DGs on an approved list published by the Authority
  - The Authority will decide the lists after reviewing advice from Transpower on which existing DG in each region avoids, reduces or defers transmission costs
    - From 1 April 2018: DGs in the lower South Island (LSI) may not be on the list and so lose ACOT payments
    - The same approach applies to DGs in the lower North Island from 1 October 2018, to DGs in the upper North Island from 1 April 2019 and to DGs in the upper South Island from 1 October 2019
  - Phased approach avoids diverting Transpower from working on the TPM and it reduces transition costs
  - The Authority intends to review the operation of the new ACOT regime, so that eligibility for ACOT payments will likely be reviewed after 5 years, or earlier if the TPM changes
- For new DGs
  - Transpower can pay any new DG that genuinely avoids transmission costs (they will not receive ACOT from distributors)
- Note
  - Transpower can contract for grid support at anytime if that is the lowest cost option for achieving grid reliability standards. Hence, claims that removing ACOT payments endangers grid reliability are simply not true

Decision: we're retaining the regulated price ceiling (for now)

- In May 2016 we proposed to remove the DGPPs completely, to remove the regulated price ceiling
- We have listened to the feedback about distributor behaviour and agree there are further issues to address before making final decisions on the regulated price ceiling issue
- Therefore, the regulated price ceiling on connection charges for DGs will remain, for now
  - This change reduces the adverse financial impact of the proposal on DGs by more than **50%** (according to analysis carried out by PWC for the Independent Electricity Generators Association)
- We still think the regulated price ceiling may not promote competitive neutrality
  - It may provide DGs with an artificial competitive advantage over grid-connected generators and other technologies including solar panels, batteries and other types of demand response
- We will revisit this issue after making further progress on transmission and distribution pricing reforms