

FN-26-010 Fortnightly report 28 May 2026

This report summarises items that may be of interest to the Minister for Energy but do not require a formal briefing. Further information can be provided on request. Substantive items will be provided by briefing.

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1. Upcoming publications

Solar installation map	
Strategic outcome	Reliable
Purpose	The Authority will publish a new, interactive Solar Installation Map tool. The map helps consumers see the approximate location, size and quantity of solar installations in their neighbourhood and aims to increase solar uptake. This makes it easier for them to understand what others nearby have installed and choose the solar and battery setup that works best for them with more confidence.
Action and timing	Media release: June 2026 (TBC)

2. Future and current consultation

Current consultation	Consultation period
Reforming distributed generation pricing to promote efficient investment (cross submissions)	Open until 3 June 2026
Consultation on some technical Code amendment proposals	12 May to 9 June 2026
Improving information on high-voltage network capacity	5 May to 16 June 2026
Preliminary discussion paper - costs and benefits of moving to 5-minute settlement	19 May to 30 June 2026
Consultation on battery and hybrid integration into the electricity market	19 May to 30 June 2026
Consultation on options to address a harmonics issue	19 May to 30 June 2026
Wholesale market arrangements for battery energy storage systems: Code amendment consultation	19 May to 30 June 2026

Future consultation	Consultation period
Consultation on improvements to product and consumption data standards	3 June to 23 June 2026

3. Update on Rankine reliability

- 3.1. At your discussion with the Authority on 14 May 2026, you requested clarification and assurance on the Huntly Rankines' reliability. This section provides an update on Rankine reliability, explaining how their outages compare to other units.
- 3.2. Key points:
- (a) The Authority has proactively engaged with Genesis, the Rankine operators, to ensure we are aware of any reliability concerns or issues.
 - (b) Data shows that the Rankines are on outage less often and for a shorter time than other more modern thermal generators.

Two Rankines are maintained for continuous running, with a third being added

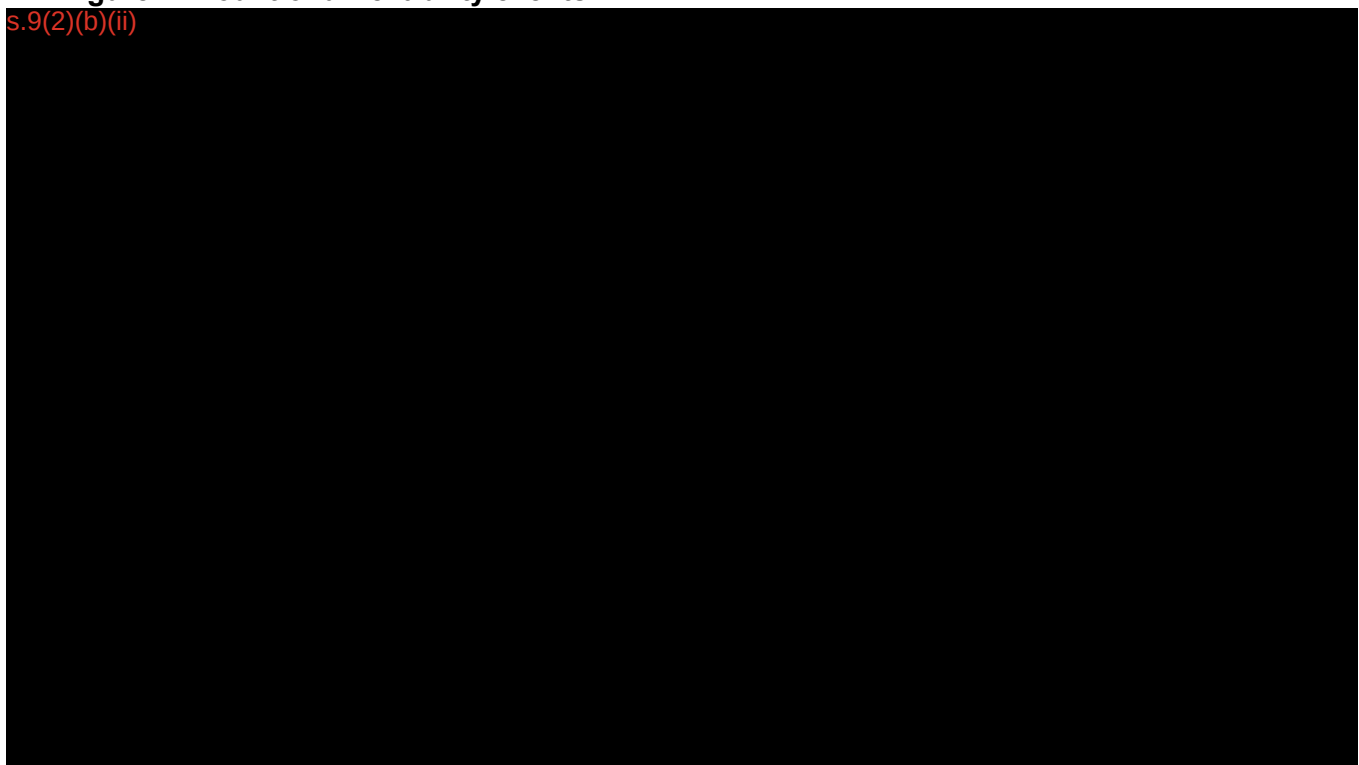
- 3.3. Two units are, and have always been, maintained for continuous running with regular investment in maintenance.
- 3.4. An additional unit is intended to be brought up to the same standard. With completion of the major maintenance on this additional unit (underpinned by the long-term Huntly Firming Options agreed last year), it is reasonable to expect three Rankine running to be more common in future.

Rankines are on outage less often than other more modern thermal generators

- 3.5. The Authority has aggregated data on thermal generator availability. This data comes from a variety of sources and includes instances of plant tripping, withdrawing offers, as well as planned outages. Figure 1 shows the count of these events. s.9(2)(g)(i)

Figure 1: Count of unreliability events

s.9(2)(b)(ii)



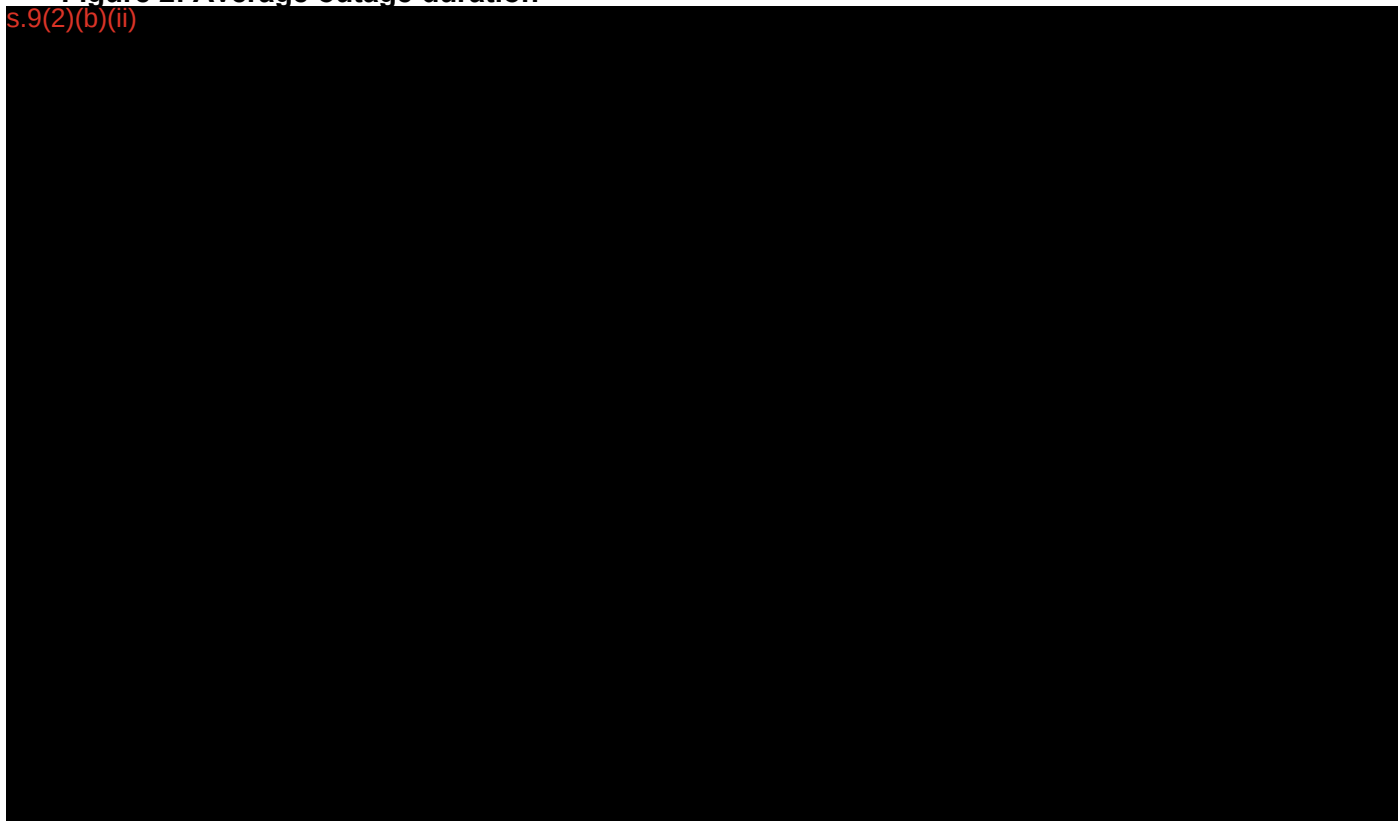
- 3.6. Not every event above had an outage logged. This could mean that it was fixed quickly enough that no outage was needed. For example, a unit might trip during start-up, requiring the generator to return to the beginning of the start-up sequence.

Rankine outages tend to be relatively short, compared to other units

- 3.7. Figure 2 estimates average outage duration. The number of last-minute outages are included in brackets next to the unit names.
- 3.8. Overall, the Rankine outages were generally short. The average outage length of Huntly 1 was ~19 hours. Huntly 2 was ~4 days and Huntly 4 was ~1 day and 5 hours.
- 3.9. This data is not adjusted to reflect how frequently each unit was dispatched to generate. Units that generate more often are likely to have a higher failure count.

Figure 2: Average outage duration¹

s.9(2)(b)(ii)



¹ The Kinleith average outage length was ~120 days and as it was skewing the y-axis we have capped the axis off at 30 days.

4. Investment pipeline monthly update: 28 May 2026

Generation investment pipeline snapshot				
45.6GW total capacity	67.6TWh/yr total energy	284 projects	107 developers	83.3% intermittent renewable

Summary of key changes since last update on 17 April 2026

- Changes from the previous update are marked up in red.
- In response to a request from the Minister, further information is provided in tabular form in Appendix A.
- 968MW of new generation commissioned since November 2023. **475MW of this is firm capacity, or generation that can reliably meet peak demand (assuming full battery availability).**
- 1,628MW is currently under construction. **401MW of this is firm capacity.**
- 38.7GW of projects progressed beyond the first stage of Transpower's grid connection process. Of those, **17.5GW** are planned for completion before 2030 (**-0.1GW since last update due to the commissioning of Contact's Glenbrook battery**), and of these, **12.9GW** are owned independently (**-0.1GW since last update, again due to the commissioning of Contact's Glenbrook battery**).²

Generation development summary

- 4.1. This section provides a key project development update and an update on the pace of generation being built relative to demand. In summary:
- (a) Generation built in the last 3 years (2022-2025) was more than double that built in the previous 8 years (2015-2022).
 - (b) Generation build is expected to outpace demand growth over the period to 2033 – building generation faster than demand growth will help support security of supply, including in dry years.
 - (c) Overall, we are 509MW better off this winter compared to the record peak from August 2023, although this is contingent on no significant unplanned outages.
 - (d) Both gentailers and independent developers are building new generation and different development options are being utilised.

Key project development updates

- 4.2. **A final investment decision has been made for Genesis Energy's 100MW Huntly BESS Stage 2. Construction is expected to begin in Q4 2026, with completion expected in Q1 2028.**

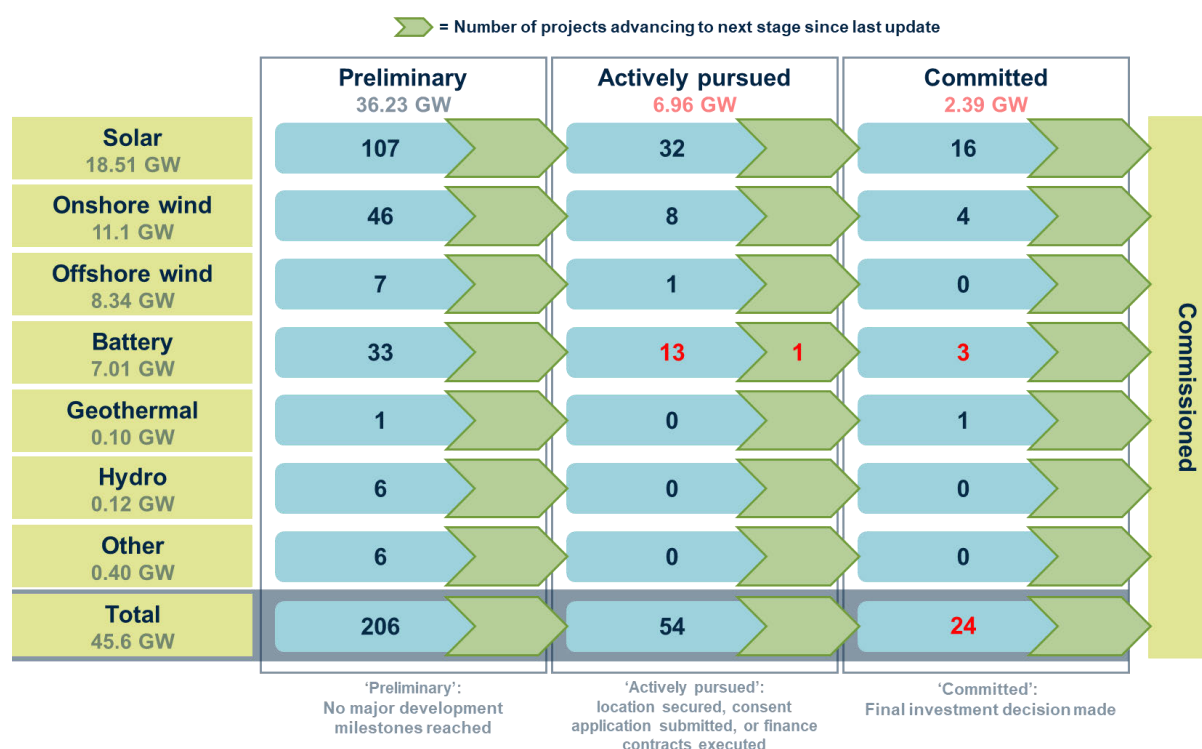
² Our generation investment pipeline data is gathered by Transpower from developers. We go through Transpower as we cannot require developers who are not participants to provide data to us, and Transpower has pre-existing processes and relationships with developers. Developers do not always provide timely and complete updates to Transpower, so we make additional corrections based on publicly available information as appropriate. This means the information provided is subject to change as developers make announcements, or provide further updates to Transpower. We are working to improve the quality and timeliness of the pipeline data we receive.

- 4.3. Westpower's embedded 23MW **Waitaha Hydro Scheme** received Fast-Track approval. Westpower has not publicly announced when a final investment decision for this scheme is expected. As this project is connected to a distribution network and does not require a new Transpower connection, it does not appear in our generation investment pipeline data. Consequently, this project is not included in the aggregate figures in this update.

Note: We are currently working on requirements for distributors to provide information on significant distribution and load connection developments, which will improve visibility of these projects. First submissions of this data are expected in December 2026.

- 4.4. Meridian's 120MW **Bunnythorpe Solar Farm** has received resource consent. A final investment decision on the project is expected in mid-2027.

Figure 3: Project advancement since 16 April 2026



Generation built in the last 3 years was more than double that built in previous 8 years

- 4.5. The volume of new generation built in the three years 2023-25 (3.74TWh, or 9% of annual 2025 demand) was more than double that built in the previous 8 years (1.65TWh, or 4% of annual 2025 demand).
- 4.6. This rate is expected to continue, with 3.75TWh of committed generation expected in the next three years, and another 3.61TWh actively pursued. 0.38TWh has been built in 2026 so far.
- 4.7. Committed projects are very likely to be built as they have had a final investment decision made by the developer. Actively pursued projects depend on multiple factors including the outcome of consent applications and market conditions.

Figure 4: Generation built since 2015 compared to the next three years of projects in the pipeline

Period built	Amount built (TWh)
2015-22 8 years	1.65TWh built 206,000 households
2023-25 3 years	3.74TWh built 468,000 households
2026-28 3 years	0.38TWh built 48,000 households
	3.75TWh committed 469,000 households
	3.61TWh actively pursued 451,000 households

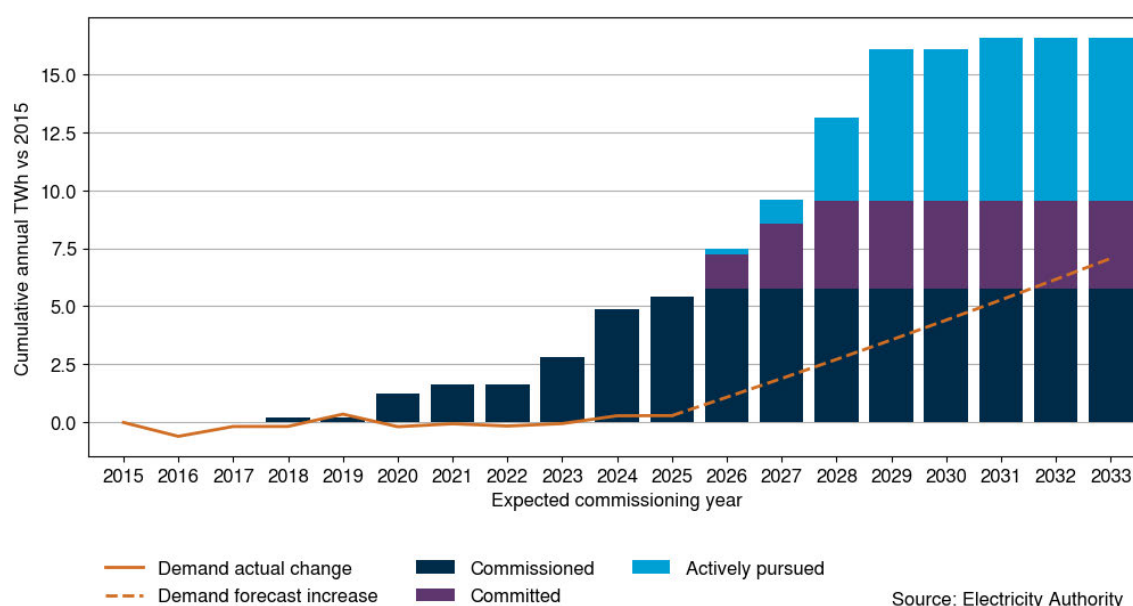
4.8. For further information on the breakdown of the 3.74TWh plus 0.38TWh of generation built between 2023 and the present day please see Appendix A Table 1.

Energy: Generation build is expected to meet demand growth, but will not be linear

4.9. Figure 5 compares the cumulative effect of generation built in the last ten years and new projects in the pipeline against historic demand change (solid orange line) and forecast future demand growth based on MBIE's reference case (dashed orange line).

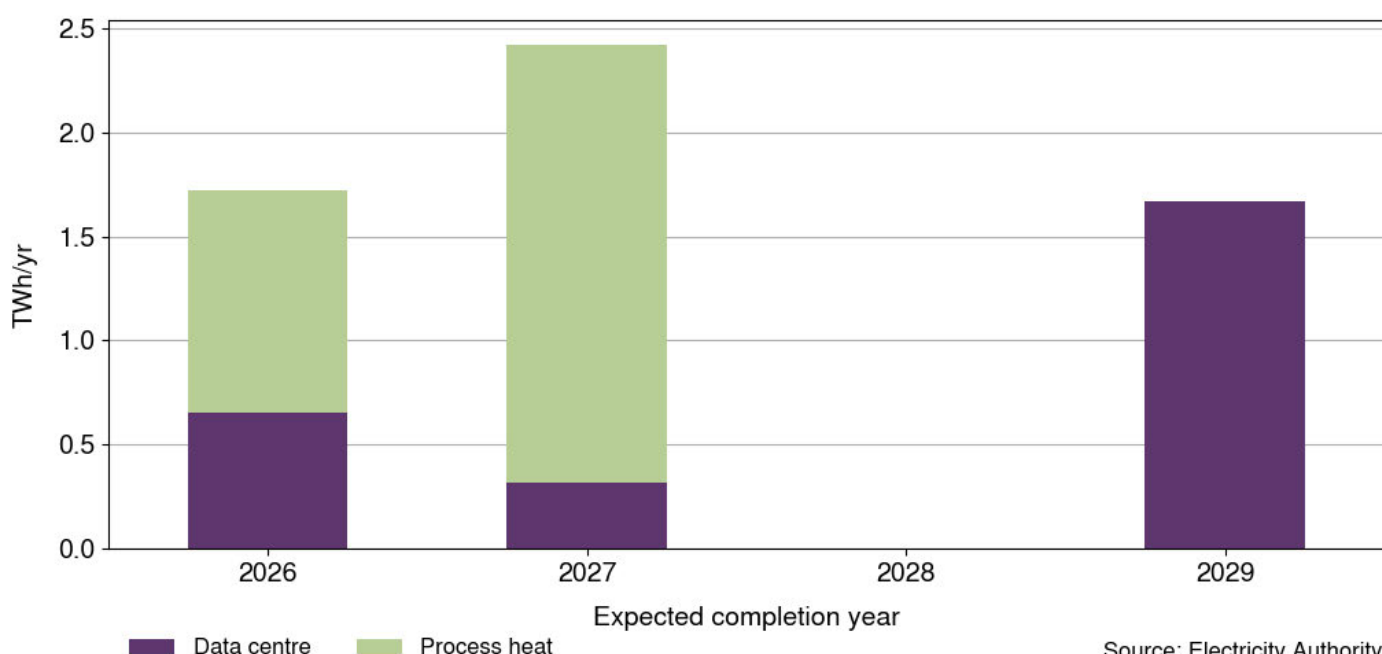
4.10. We assume an average capacity factor for each type of generation to calculate total energy in the pipeline (with batteries providing zero energy).

Figure 5: Cumulative generation pipeline versus 2015 against real and forecast demand change



- 4.11. Demand growth has been relatively flat in the last ten years but has begun to increase recently, despite industrial closures and demand response.
- 4.12. Already commissioned new generation and committed new generation is sufficient to meet the forecast increase in annual demand included in MBIE's reference case (~0.8-0.9TWh additional demand per year).
- 4.13. However, demand growth is unlikely to be linear. Industrial electrification will contribute to step changes in demand. Figure 6 shows the annual demand of load projects in our pipeline that are beyond Transpower's first stage. This includes the NZ Steel arc furnace (expected to add ~0.26TWh/yr in 2026), Fonterra Whareroa electrification, and the Datagrid data centre in Southland (expected to add ~1.7TWh/yr in 2029). As with generation projects in the pipeline, not all projects will necessarily be built.

Figure 6: Annual demand from load projects that have progressed beyond the first stage of Transpower's grid connection process



- 4.14. Demand forecasts are simply an estimate and are subject to uncertainty. However, the current trend illustrates that forecast supply is currently outpacing forecast demand, which helps support downward pressure on wholesale prices.
- 4.15. In April, the System Operator released its draft 2026 Security of Supply Assessment (SOSA). Its assessment is that there is “adequate but fragile” winter energy margins for 2026-28 with an “emerging energy gap” by 2031. s.9(2)(g)(i)

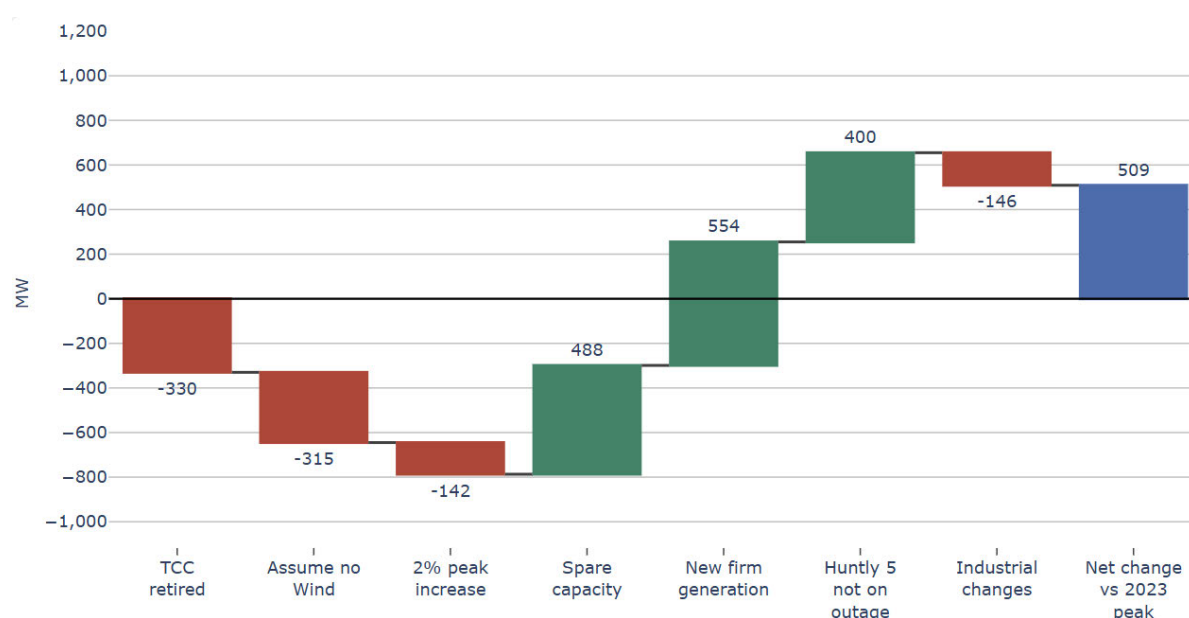
Capacity: Overall, we are 509MW better off this winter compared to this record peak from August 2023 (assuming no unplanned significant generation outages)

- 4.16. Figure 7 shows that despite the retirement of Contact's TCC, a pessimistic assumption of no wind generation being available, and an assumed 2% increase in peak demand, we are better placed to meet peak demand this winter than the record peak period in August 2023. Some key points in the figure to note:

- (a) The August 2023 peak period had spare capacity in the form of controllable hot water and generation not dispatched. This totals 488MW.
- (b) Firm generation built since 2023 now available or expected to be completed before winter this year improves capacity by 554MW (this includes Tauhara, Te Huka 3, TOPP2 and Ngā Tamariki geothermal stations, and Rotohiko, Ruakākā and Glenbrook batteries).
- (c) Huntly 5 was on outage in 2023 but is available for this winter, improving generation capacity by 400MW.
- (d) Industrial changes, including closures and commissioning/electrification of existing sites like Fonterra, result in a net *increase* to peak demand of up to 146MW.

4.17. There are also additional geothermal and battery projects in the pipeline which are expected to be completed in 2027 and 2028 (336MW committed).

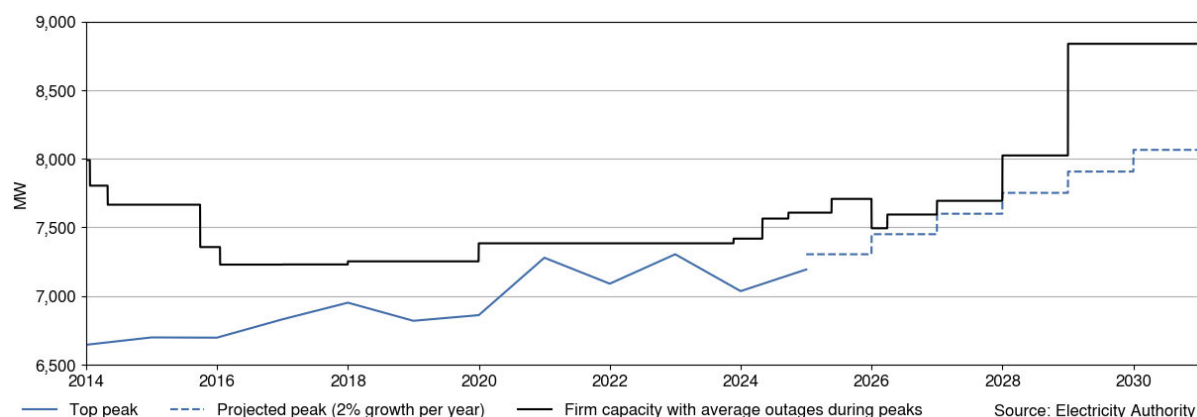
Figure 7: Winter 2026 generation capacity available compared to record peak from August 2023



4.18. Figure 8 shows that additional committed and actively pursued firm generation capacity (batteries and geothermal) is sufficient to meet peak demand based on typical outages during peak periods (the dashed blue line is mostly below the black line). 2026 and 2027 are the tightest, after that, more batteries are expected to come online and quickly improve firm generation capacity. This analysis excludes wind, solar and emergency measures like hot water control and spinning reserves which would improve capacity.

4.19. The inclusion of the 100MW Glenbrook battery since the previous briefing has increased firm generation capacity from April 2026 onwards.

Figure 8: N-G firm generation capacity versus peak demand (estimated +2%pa on 2023 peak, unlikely to be linear each year as pictured)



Both gentailers and independent developers are building new generation and different development options are being utilised

- 4.20. Independent developers are contributing a similar percentage to new capacity build as in recent years. Since 2024, they built 29% of the new capacity – and currently have 25% of the committed capacity in the pipeline (Figure 9).
- 4.21. Appendix A Table 2 illustrates the developers and timelines of the committed projects that have begun construction or commissioning.

Figure 9: Generation capacity built and in the pipeline by major gentailers and other developers

Period built	Projects built or in the pipeline	
	Major gentailers	Others
2018-23 6 years	5 projects built 574MW (73%)	5 projects built 219MW (27%)
2024-present 2+ years	6 projects built 518MW (71%)	8 projects built 214MW (29%)
2026+ Committed	13 projects 1,777MW (75%)	11 projects 608MW (25%)

- 4.22. This does not necessarily mean all this new build will operate under independent generators. Within a competitive market, there are various options for the development process:

(a) create an initial concept for development to sell

- (b) create and develop the project to completion but sell once it becomes operational, and
 - (c) create, develop and subsequently operate the new generation.
- 4.23. We will continue to closely monitor the uptake of these different routes – if any one route becomes less frequent this may indicate potential barriers.
- 4.24. Three committed projects and one actively pursued project are being developed by independents but have either been purchased by a gentailer or a gentailer has a power purchase agreement for all of the electricity produced:
 - (a) Genesis is planning to acquire the Rangiriri and Leeston solar farms from independent developers.
 - (b) Meridian has signed a power purchase agreement for all the generation from the Tauhei solar farm.
 - (c) Genesis has a power purchase agreement for 70% of the electricity from the Mt Cass windfarm under development by Yinson Renewables.
- 4.25. Some independent developers have already brought new generation to the market in the last couple of years and are now operating this generation:
 - (a) Lodestone solar (four solar farms operational)
 - (b) Eastland generation (one new geothermal station in addition to their existing two)
 - (c) Ranui generation, Far North Solar Farms, Newpower and Northpower (one solar farm operational each).

Appendix A Generation projects

Table 1: Projects built between 2023 to present

Error! Reference source not found. shows the breakdown of the 3.74TWh plus 0.38TWh of generation built between 2023 and the present day.

Project	Capacity	Expected annual GWh	Developer	Year commissioned
Kaitaia Solar Farm	24MW	34.3GWh	Lodestone Energy	2023
Harapaki Wind Farm	176MW	616.7GWh	Meridian Energy	2023
Rotohiko BESS	35MW	N/A	NewPower Energy	2023
Kaiwera Downs Stage 1 Wind Farm	43MW	150.7GWh	Mercury	2023
Turitea Wind Farm	103MW	360.9GWh	Mercury	2023
Ruawai Solar Farm	17MW	24.3GWh	Northpower	2024
Te Herenga o Te Rā Solar Farm	33MW	47.1GWh	Lodestone Energy	2024
Lauriston Solar Farm	47MW	67.1GWh	Genesis Energy	2024
Rangitaiki Solar Farm	24MW	34.3GWh	Lodestone Energy	2024
Tauhara Geothermal Plant	174MW	1448GWh	Contact Energy	2024
Te Huka 3 Geothermal Plant	51MW	424.2GWh	Contact Energy	2024
Pāmu Rā ki Whitianga Solar Farm	24MW	34.3GWh	Lodestone Energy	2025
Pukenui Solar Farm	21MW	30GWh	Far North Solar Farm	2025
Twin Rivers Solar Farm	24MW	34.3GWh	Rānui Generation	2025
Ruakakā BESS	100MW	N/A	Meridian Energy	2025
TOPP2 Geothermal Plant	49MW	407.8GWh	Eastland Generation	2025
Taiohi Solar Farm	22MW	31.4GWh	NewPower Energy	2025
Ngā Tamariki Geothermal Plant expansion	46MW	382.8GWh	Mercury	2026
Glenbrook BESS	100MW	N/A	Contact Energy	2026

Table 2: Expected commissioning timeline of projects under construction

Table 2 illustrates the developers and timelines of the committed projects that have begun construction or commissioning.

Project	Capacity	Expected commissioning	Previously reported expected commissioning (if changed)	Developer
Papareireiā Solar Farm	21MW	2025		Maungaturoto Solar Farm Project LP
Omehu Solar Farm	38MW	Q1 2026		Far North Solar Farms
Kōwhai Park Solar Farm	150MW	Q3 2026	Q2 2026	Contact Energy/ Lightsource BP
Clandeboyne Solar Farm	28MW	Q3 2026		Lodestone Energy
Huntly Stage 1 BESS	100MW	Q3 2026	Late 2026	Genesis Energy
Maungatapere Solar Farm	17MW	November 2026		Northpower
Kaiwera Downs Stage 2 Wind Farm	155MW	November 2026		Mercury
Tauhei Solar Farm	150MW	Late 2026		Harmony Energy/First Renewables
Kaiwaikawe Wind Farm	77MW	Late 2026		Mercury
Ruakākā Solar Farm	130MW	Early 2027		Meridian Energy
Te Rahui Solar Farm	200MW	Mid 2027		Nova Energy
Edgecumbe Solar Farm	117MW	2027		Genesis Energy
Te Mihi Stage 2 Geothermal Plant	101MW (36MW net)	September 2027		Contact Energy
Danniverke Solar Farm	23MW	Unknown		Bright Fern /GameChange
Kapuni Wind Farm	25.6MW	2027		Hiringa Energy
Glenbrook 2.0 BESS	200MW	Q1 2028		Contact Energy
Mt Cass Wind Farm	95MW	2028		Yinson Renewables