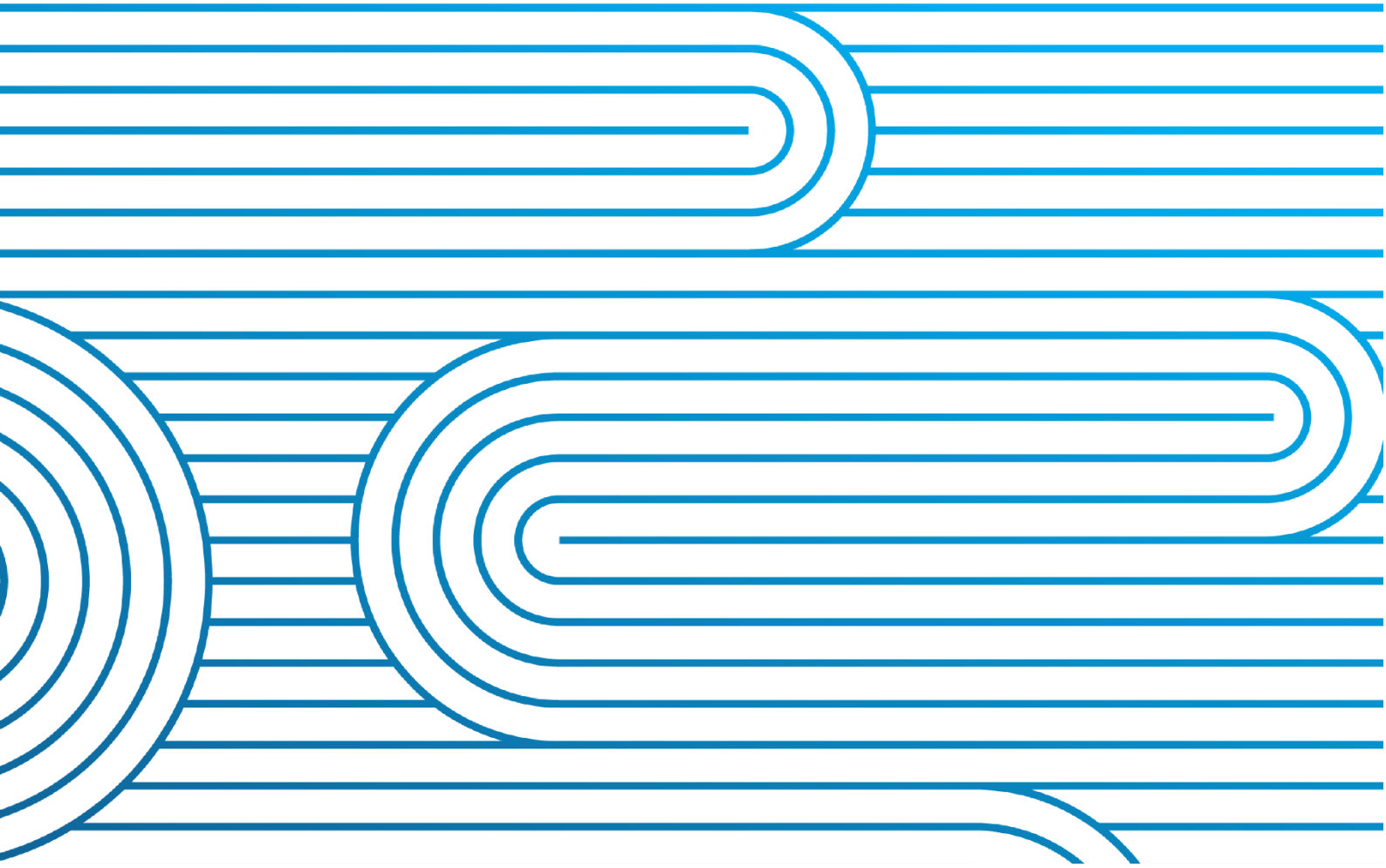
TRANSPOWER

# Monthly System Operator performance report

For the Electricity Authority

**Date: August 2025**



This report is Transpower's review of its performance as System Operator in accordance with clauses 3.13 and 3.14 of the Electricity Industry Participation Code 2010 (the Code):

***3.13 Self-review must be carried out by market operation service providers***

*(1) Each **market operation service provider** must conduct, on a monthly basis, a self-review of its performance.*

*(2) The review must concentrate on the **market operation service provider's** compliance with—*

*(a) its obligations under this Code and Part 2 and Subpart 1 of Part 4 of the **Act**; and*

*(b) the operation of this Code and Part 2 and Subpart 1 of Part 4 of the **Act**; and*

*(c) any performance standards agreed between the **market operation service provider** and the **Authority**; and*

*(d) the provisions of the **market operation service provider agreement**.*

***3.14 Market operation service providers must report to Authority***

*(1) Each **market operation service provider** must prepare a written report for the **Authority** on the results of the review carried out under clause 3.13.*

*(1A) A **market operation service provider** must provide the report prepared under subclause (1) to the **Authority**—*

*(a) within 10 **business days** after the end of each calendar month except after the month of December:*

*(b) within 20 **business days** after the end of the month of December.*

*(2) The report must contain details of—*

*(a) any circumstances identified by the **market operation service provider** in which it has failed, or may have failed, to comply with its obligations under this Code and Part 2 and Subpart 1 of Part 4 of the **Act**; and*

*(b) any event or series of events that, in the **market operation service provider's** view, highlight an area where a change to this Code may need to be considered; and*

*(c) any other matters that the **Authority**, in its reasonable discretion, considers appropriate and asks the **market operation service provider**, in writing within a reasonable time before the report is provided, to report on.*

By agreement with the Authority, this report also provides monthly (rather than quarterly) reporting in accordance with clause 12.3 of the 2025 System Operator Service Provider Agreement (SOSPA):

*12.2 **Monthly reports**: The **Provider** must provide to the **Authority**, with each self-review report under clause 3.14 of the **Code**:*

*(a) a report on the progress of any **service enhancement capex project** or **market design capex project** that has commenced and has either not been completed or was completed during the month to which the report relates, including:*

*(i) to any actual or expected variance from the **capex roadmap** in relation to that **capex project**; and*

*(ii) the reasons for the variance;*

*(b) a report on **the technical advisory** services in accordance with the **TAS guideline;***

(c) *the actions taken by the **Provider** during the previous month:*

(i) *to give effect to the **system operator business plan**, including to comply with the **statutory objective work plan**;*

(ii) *in response to participant responses to any participant survey; and*

(iii) *to comply with any remedial plan agreed by the parties under clause 14.1(i);*

(d) *the **technical advisory hours** for the previous quarter and a summary of **technical advisory services** to which those **technical advisory hours** related; and*

(e) *in the report relating to the last month of each quarter, the **Provider's** performance against the **performance metrics** for the **financial year** during the previous quarter.*

System Operator performance reports are published on the Electricity Authority website in accordance with clause 7.12 of the Electricity Industry Participation Code 2010 (the Code):

***7.12 Authority must publish system operator reports***

*(1) The **Authority** must publish all self-review reports that are received from the **system operator** and that are required to be provided by the system operator to the **Authority** under this Code.*

*(2) The **Authority** must **publish** each report within 5 **business days** after receiving the report.*

Following the end of each Quarter, a system performance report is published on the Transpower website

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# Key points this month

**Operating the power system**

- On 4 August Edgecombe-Waiotahe-2 tripped and successfully auto reclosed. However, WAI CB 1362 remained open resulting in a loss of connection to Lodestone Energy's 23 MW solar generation at Waiotahe.
- On 19 August we issued a Warning Notice (WRN) to North Island participants to highlight potential scarcity prices due to insufficient transmission capacity in the Hawke's Bay region. Participants responded with various actions that mitigated the risk.

**Security of supply**

- *Security of Supply Forecasting and Information Policy (SOSFIP) review:* We have commenced drafting our consultation documents as we finalise our analysis and remain on track to consult with industry from late September. Electricity Authority staff are also involved in reviewing draft material and analysis.
- *Energy Security Outlook (ESO):* The August ESO highlighted an increased risk in early 2026, due to a decrease in near term forecast gas production, but a slightly decreased risk in July 2026 due to expected generator commissioning. National hydro storage has decreased rapidly through August to 77% of the seasonal mean due to high demand, low inflows, and hydro making up an above average proportion of the generation mix.
- *Industry Exercise 2025:* The lessons learned document was approved by the Authority and published in August. We have commenced work to address the resulting actions identified.
- *New Zealand Generation Balance (NZGB):* The NZGB has highlighted healthy capacity margins through the rest of winter. This is in part due to generators taking planned outages outside of winter, and there being few unplanned outages.

**Investigations**

- *11 July 2025 – HVDC event:* During August, we made steady progress on our engineering investigation and expect that we will soon be able to share our findings with the Authority.
- *20 June 2024 – Northland loss of supply:* We remain on track to close out the one remaining action in response to both the Ray Hardy report and the Authority's report.

**Supporting Asset-owner Activity**

- *Outage co-ordination:* Outages for August remained around 50 per week which is typical for this time of year. This along with favourable generation profiles resulted in very few constraints, reducing potential impacts on the market.
- *Generator commissioning and testing:* Through August we continued our work to support new generation commissioning in the coming months including Twin Rivers Solar Farm near Kaitaia (25 MW), 'Golden Stairs' Solar Farm at Maungaturoto (17.6 MW), Taiohi Solar Farm at Rangiriri (22 MW), Lodestone's Whitianga Solar Farm (24 MW), Mercury Energy's Ngatamariki geothermal expansion near Taupo (54 MW), Eastland Generation's 'TOPP2' geothermal station at Kawarau (52 MW), and Contact Energy's Glenbrook BESS (100 MW).
- *Ancillary services activity:* The approved new Ancillary Services Procurement Plan came into effect from 7 August, and we continue our preparations for the 2025 Ancillary Services tender process. Meridian's Ruakaka BESS is now contracted to provide Instantaneous Reserves, and we also have various engagements underway to support LastMyle, Envex, and Simply Energy.

**Commitment to evolving industry needs**

- *Evolving markets resource co-ordination - Tie-breaker provisions*: We received 7 submissions and 2 cross submissions to our "tie breaker" situations consultations. We are now working on the summary of submissions and our response.
- *Hawke's Bay restoration workshop*: On 7 August the System Operator jointly with the Grid Owner held a workshop with industry participants to discuss system restoration plans for Hawke's Bay.
- *System Security Forecast:* We published our additional studies on Transient Rotor Angle Stability (TRAS) and discussed the results with affected generators.
- *Electricity Networks Aotearoa (ENA):* Our representative attended weekly Future Networks Forum meetings in relation to the Authority's consideration of three potential TSO/DSO models – Total TSO, Total DSO, and a hybrid.
- *Grid Owner Outage Optimisation:* The System Operator is supporting the Grid Owner to implement initiatives that will enable longer outage lead times and improve cross-industry outage planning and co-ordination.

**International Engagement**

- *Electric Power Research Institute (EPRI):* We met with EPRI to discuss our Operational Intelligence programme of work, which forms part of Control Room of the Future initiative, and find out what similar developments they and/or other parties have underway.
- *Australian Power System Security Working Group (PSSWG):* We received a 'guest invite' to the PSSWG chaired by AEMO. This is a forum for transmission System Operators to discuss matters related to real-time operation and power system security of the National Electricity Market transmission system.

**Risk & Assurance**

- *Risk management:* We provided an updated Risk Register to the Authority's Market Operations Committee and discussed our plans for reporting against key risks. We are working on a report to provide to the Authority regularly going forward.
- *Business assurance audits:* We progressed work on our first two audits of four this year, black start test planning, and preparedness for space weather events.

# 1 Operating the power system

## 1.1 System events

| Event Date | Event Name | Event Activity |
|---|---|---|
| 4 August 2025 | Loss of connection at Waiotahe (WAI) | On 4 August at approximately 16:19 Edgecombe – Waiotahe – 2 (EDG-WAI-2) tripped and successfully auto reclosed. However, circuit breaker WAI CB 1362 remained open as designed for anti islanding requirements. This resulted in a loss of connection to Lodestone Energy's 23MW solar generation. By 16:30 connection was restored. |
| 19 August 2025 | WRN: Insufficient transmission capacity Hawkes Bay | On 19 August we issued a Warning Notice (WRN) to North Island participants to highlight that the latest schedule was showing scarcity prices due to insufficient transmission capacity in the Hawke's Bay region between 10:00 – 15:30 on Wednesday 20 August. Participants responded by increasing generation in the region, delaying an outage until the weekend, moving load between GXPs, and the Grid Owner offering a conditional split at Redcliffe. As a result of these actions the risk was mitigated. |

## 1.2 Market operations

Forecast v real-time residual variability: We monitor the variations between forecast and real-time dispatch conditions to determine if the 200 MW residual continues to provide sufficient coverage to cater for within trading period variations in demand and supply. The graph in Appendix B presents, for the last 24 months, the proportion of time within each month that a 200 MW residual was sufficient to cover the variation in load and intermittent generation between forecast (30 minutes ahead of real-time) and real-time.

In July more than 97% of the variability is covered by the 200 MW residual. This indicates that entering a trading period with at least 200 MW of residual provided a high chance of having sufficient market resources to meet the variability within the period.

# 2 Security of supply

Security of supply forecasting and information policy (SOSFIP) review: Through August we have continued to finalise the analysis phase of the SOSFIP review, and have shifted our focus to drafting the consultation documents as we remain on track for industry consultation from late September.

Energy Security Outlook (ESO): The August Energy Security Outlook published on 29 August showed an increased risk in January to May 2026, and a slightly decreased risk in July 2026. The increase in risk is primarily due to a decrease in near term forecast gas production. The slight decrease in risk in

July 2026 is due to expected generator commissioning. This update continued to assume one Rankine is unavailable from 2026. However, we also studied a scenario where all three Rankine units remained available, which had the effect of reducing the risk curves (note the announcement on 4 August of a 10 year agreement between Genesis, Mercury, Meridian and Contact to establish a strategic energy reserve which would keep all three Rankine units available, subject to Commerce Commission review).

National hydro storage decreased rapidly from 96% of the seasonal mean at the start of August to 77% on 1 September. This was due to high demand, low inflows, and hydro making up an above average proportion of generation throughout the month of August. At the end of August storage was below the 10$^{th}$ percentile for this time of year.

High evening demand peaks on 4 and 5 August resulted in residuals under 500 MW, but above the low residual CAN threshold of 200 MW. TCC ran from 11 August, and all peak residuals for the remainer of the month were over 700 MW, which is healthy for August.

Industry Exercise 2025: A lessons learned document was approved by the Authority and published in August. The System Operator has commenced work on addressing actions resulting from lessons learned. High level discussion on next year's scenario has commenced, with Space Weather top of the list.

New Zealand Generation Balance (NZGB) potential shortfalls: The latest NZGB update is available through our Customer Portal. New Zealand Generation Balance (NZGB) is showing healthy capacity margins through the rest of spring. This is in part due to generators taking planned outages outside of winter, and few unplanned outages. At the time of writing Huntly 5 has indicated it will have limited availability from October to end of December. The impacts of this, and how it should be modelled against power system risks is being determined.

The modelling does continue to show that to meet a high peak demand period we will be relying on the market to co-ordinate slow start unit commitment and/or high wind generation. This is more apparent during the planned Wairakei ring outages planned for early December, these outages cause constraints that result in a large reduction in available generation.

# 3 Investigations

**Under-frequency event investigations**

11 July 2025 HVDC event: We continued investigating the event and expect that we will soon be able to share our findings with the Authority.

**Significant incident investigations**

20 June 2024 - Northland loss of supply Actions: We have one outstanding action which is due for completion at the end of 2025. It involves assessing contingency plans for other regions to determine where relaxed security standards can be provided during an event.

# 4 Supporting Asset-owner activity

## 4.1 Outage Coordination

Following the typical seasonal outage profile, average weekly outages remained around 50 per week, which compares to 60 – 80 during spring and summer. Due also to favourable generation profiles there were very few constraints as a result of planned outages, reducing market impact.

An outage on Islington - Tekapo B circuit was delayed by 1 hour due to high loads in the upper South Island. This was prewarned with a delay strategy agreed between the Grid and System Operations teams, Orion, Grid Delivery, and the service provider in the event loads were too high. This was a good example of the teams across Transpower proactively seeing a risk, working together to develop a mitigation strategy and executing it.

Short notice outage requests (SNORs) continued to track at around 33% of total outage windows, maintaining the 10% reduction seen since the start of the year when focus increased on SNORs with the intent of bringing numbers down. To help keep the focus we are now sharing a report each week in the daily Grid Operational meetings (that the System Operator attends) to run through each SNOR requested. This will provide transparency and build trust in the process and self-compliance.

During August Haywards synchronous condensers 2&3 were removed for 11 months due to operational risk. This has reduced the HVDC power transfer limit north by 100MW. However, during November due to other concurrent outages of HVDC plant there will be one week with HVDC power transfer limit north will be reduced to 600MW. Huntly 5 will be on outage. To date we have been unable to find any outages that can move efficiently to help reduce the impact on the HVDC.

## 4.2 Generator commissioning and testing

The Power Systems and Markets teams are working with the following generators who are commissioning or expecting to connect in the next 6 months:

- Ranui's Twin Rivers Solar Farm near Kaitaia (25 MW connected to Top Energy) is due to begin commissioning in September 2025.
- Eastland Generation's Te Ahi O Maui geothermal generation station at Kawerau (24 MW connected to Horizon) is due to move from their existing 11kV connection to a 220kV connection in September, ahead of commissioning their nearby 'TOPP2' geothermal station (52 MW) starting in October 2025.
- Solar Bay and Maungaturoto Solar Farm Project's 'Golden Stairs' Solar Farm at Maungaturoto (17.6 MW connected to Northpower) is due to begin commissioning in October 2025.
- New Power's Taiohi Solar Farm at Rangiriri (22 MW connected to WEL Networks) is due to begin commissioning in October 2025.
- Lodestone's Whitianga Solar Farm (24 MW connected to Powerco) is due to begin commissioning in November 2025.
- Mercury Energy's Ngatamariki expansion near Taupo (addition of a new 54 MW geothermal unit) is due to begin commissioning in November 2025.
- Contact's Glenbrook BESS (100 MW at GLN) next to the NZ Steel mill is due to begin commissioning December 2025.

We are also working with existing generators to commission maintenance and upgrade projects.

In addition we are working with NZ Steel on the commissioning of their STATCOM and Arc Furnace at Glenbrook. We are currently discussing options for operational communications with NZ Steel and the Grid Owner, and encouraging NZ Steel to progress their planning of compliance-related commissioning and testing.

**Demand commissioning and testing**

Edendale load forecast: The Authority has reclassified the Edendale (EDN0331) GXP as non-conforming. We have updated our market tools accordingly and contacted all purchasers at EDN to remind them of their obligation to bid. To date no purchasers have responded however five purchasers are setup in our tools to accept bids.

Invercargill GXP: A new 66kV GXP is due to start in September alongside existing Invercargill 33kV supply. The new 66kV GXP is for PowerNet's Awarua upgrade.

## 4.3 Ancillary Services activity

Commissioning support:

- LastMyle is now connected to our pre-production system, and we will work with them to test dispatch and finalise the review of their proposal.
- Meridian's Ruakākā BESS is now contracted to provide Instantaneous Reserves (IR).
- We are reviewing a proposal from Envex for offering Interruptible Load (IL) and if feasible we will work with them as they get connected to our systems.
- We are working with Simply Energy to transfer dispatch of reserves (contracted through Contact Energy) from Contact to Simply
- Both Contact and Genesis are making provision for their BESS systems to provide frequency keeping in the future.

Ancillary Services optimisation initiative: Our discovery and analysis phase are well underway. We have successfully launched our Voice of the Customer survey and conducted an in-person interview. The feedback collected is now informing our current state analysis and helping us identify key opportunities for improvement. In parallel, development of our service blueprint and customer journey maps is also progressing well.

Disaggregation of Interruptible Load (IL) at Kawerau and in Hawke's Bay: We have discussed the need to disaggregate interruptible loads within the Hawke's Bay and Kawerau regions with affected reserves providers. These providers have agreed to work with the System Operator to disaggregate their sites as we have requested, within a suitable timeframe. We will be testing these changes during September.

Interruptible Load: The following table provides an overview of interruptible load testing activity by the number of sites tested and associated additional quantities for those sites.

| | Number of sites | Additional quantities in MW | |
|---|---|---|---|
| **Annual testing** | 3 sites | N/A | |
| **Additional resource** | 2 sites | 1.080 MW FIR | 1.337 MW SIR |

Over-Frequency Reserve (OFR): The following table provides an overview of OFR testing activity.

| | Number of sites overdue |
|---|---|
| **Four yearly end-to-end relay testing** | 4 |
| **Two yearly control and indication testing** | 22 |
| **Circuit breaker testing** | 27 |

Frequency Keeping: One station in the South Island remains unavailable to provide frequency keeping as a result of failed testing. Testing was carried out in August however further testing is required before the station can offer frequency keeping.

Black Start: Planning is underway for testing at Tokaanu Power Station in October 2025.

# 5 Commitment to evolving industry needs

Evolving markets resource co-ordination - Tie-breaker provisions: We have completed our consultation seeking feedback on how "tie-breaker" situations should be resolved for multiple competing generation offers at the same location in the wholesale electricity market. We received 7 submissions and 2 cross submissions which are available on our website. We are now working on the summary of submissions and our response.

Hawke's Bay Restoration Workshop: On 7 August the System Operator jointly with the Grid Owner held a workshop at Unison's head office with industry participants to discuss system restoration plans for Hawke's Bay. Topics included North Island Black Start, regional restoration via the 220kV or 110kV, Hawke's Bay islanding / dead bus restart from Tuai, lessons from Cyclone Gabrielle and the December 2024 loss of supply, and work Transpower has done to improve resilience in the area. The workshop was well attended, including representatives from Genesis, Contact, Unison, Firstlight, and PanPac. Meridian and NEMA were unable to attend.

System Security Forecast: We published additional studies on Transient Rotor Angle Stability (TRAS), and discussed the results with affected generators including Contact, Meridian and Mercury. We initially expected TRAS to be a concern for Manapouri under low Tiwai (TWI) loads, but we are now seeing some instabilities due to higher outputs of the proposed Kaiwera Downs Stage 2 windfarm. For the first time we have assessed the stability with increased IBR penetration and low inertia scenarios. We are analysing options for mitigating the TRAS risk which could involve constraining some generation under certain scenarios.

Electrical Industry Space Weather Working Group (EISWWG): No meetings of the working group were held over August. The System Operator has commenced further refinement of its internal response procedure to better align with the industry response to a 'catastrophic' event. We continue to engage with NEMA and are planning to support their space weather exercise scheduled over four days, 3 – 6 November.

Electricity Networks Aotearoa (ENA) Future Networks Forum (FNF): Weekly FNF meetings concerning the Capabilities, Roles, and Functions needed to enable distributed flexibility ("TSO:DSO") were attended by the System Operators representative in August. The focus of these meetings was primarily to assist the Authority with their thinking on performing a CBA on the three models (Total TSO, Total DSO, hybrid) presented in their "The future operation of New Zealand's power system" consultation.

Grid Owner Outage Optimisation: The System Operator is supporting the Grid Owner to implement its identified target state. Four Grid Owner initiatives are being progressed:

- Create a process to agree and implement a rolling 4 monthly locked down plan. The Grid Owner completed its second monthly process in August and next time changes and approach for delivering the 26/27 annual outage plan with increased outage numbers.
- Next time around they will begin by locking down 2 months in advance, with the intent to lock down 4 months by February.
- The System Operator is supporting their initiative by scanning for outages that have significant work associated with them and providing a preliminary outage assessment up to

6 months in advance. This allows the Grid Owner to adjust their plans very early int eh planning process as opposed to the normal 10 week timeframe provided by the System Operator.

The System Operator supports these initiatives as they will result in longer Grid Owner outage lead times and certainty. This will enable better, more certain cross-industry outage planning and coordination.

Outage Coordination: We receive positive market feedback when we provide information on high level operational impacts of material outages via our System Operator forum. In response to this we have made a conscious effort to release more information on a regular basis. During August we shared information on the impact of the:

- Synchronise condenser 3&4 outages on the HVDC transfer.
- Islington Ashburton circuit outages on upper South Island load.
- Dates and generation impacts of Wairakei ring outages.
- We also shared the operational impacts of the new Karapiro Special Protection Scheme on Karapiro generation.

We aim to release more information as the outage volumes increase during spring, summer and autumn.

**Connecting with the industry**

System Operator Industry Forums: Our fortnightly discussions on current operational and market issues were held on 5 and 19 August. Recent slide packs and recordings for forums within the last month are available on our System Operator Industry Forum webpage.

Market Operations Weekly Reports: Our Market Operations Weekly Reports provide information to assist interested parties' understanding of the current security of supply situation[1] and other market events. These reports also include a Market Insight each week covering a topic of interest to the industry. The reports we published this month, and the Market Insight in each are as follows[2]:

- 3 August: Tie-breaker constraint in Scheduling, Pricing and Dispatch
- 10 August: Generation mix of the top 10 demand periods
- 17 August: Difference between conforming and non-conforming grid exit points
- 24 August: Daily solar generation profiles in winter

## 5.1 Supporting the Authority

Emergency Reserve Scheme (ERS): We have commenced the next phase in investigating an Emergency Reserve Scheme with TAS 122. This project will focus on developing a high-level process for delivering a Minimum Viable Product (MVP) ERS that is implementable before Winter 2026. This work will involve a number of workshops with Operations SMEs attended by the Authority's project representatives.

SOSPA transition update: Through August we continued our work on the initial stage of the System Operator strategy refresh, which is focussed on the environmental scan. Our update to the Authority MOC quarterly meeting on the approach we are taking resulted in a helpful discussion. The other priority piece of work in August is to progress the update of the Joint Work Planning Team (JWPT)

[1] As required by the Security of Supply Forecasting and Information Policy section 11, incorporated by reference into the Electricity Industry Participation Code 2010

[2] Past Market Operations Weekly Reports including our weekly insights can be viewed on our website,.

Terms of Reference which the Authority and System Operator need to be finalise and agreed by 30 September.

MFK Enhancements: We continue to scope the TAS investigation into multiple frequence keeping (MFK) enhancements with the Authority, aiming for commencement in Q2 FY26. We have engaged further with the Authority this month as part of a review of the FSR Roadmap to ensure alignment between that programme and the Authority's operational policy work, of which this is one example.

Consultation on Future system operation: DSO models: As System Operator, we submitted to the Electricity Authority's consultation on future models for managing New Zealand's power system. We supported a hybrid model, building on current arrangements because it offers the flexibility and adaptability needed to meet New Zealand's evolving energy needs. We also indicated our readiness to take on a broader role if the Authority chooses the Total-TSO model, provided appropriate funding and resources are in place. Regardless of the model chosen, we recommended the Authority begin work now on key foundational initiatives common to all options, such as improving data exchange and learning from international experience, particularly in Australia

Intermittent generation central forecasting project: The project has been successfully implemented. We continued to engage with the Authority and DNV through August to support ongoing improvements in forecast accuracy, including providing a new real-time curtailment data feed to DNV by the end of September.

Monitoring static Forecast of Generation Potential (FOGP) values: Static FOGP has become less of a concern since the new hybrid IG forecast arrangement commenced on 31 July 2025. Under this arrangement, IG forecasters update FOGP every 30 minutes covering for the next 7 days.

## 5.2 International Engagement

Electric Power Research Institute (EPRI): EPRI, based in the United States, have an established R&D network collaborating across 45 countries to drive innovation in all facets of the electricity industry. We met with them to discuss our Operational Intelligence programme of work, which forms part of Control Room of the Future initiative, to find out what similar developments they have underway or know others are undertaking. Based on the discussion it seems that while many are talking about this type of work, not many have progressed far yet. EPRI noted REA in France and 50Hz in Germany as probably the furthest ahead and working on some interesting concepts. EPRI also shared work they have been doing using AI to process alarm data, given its very structured nature. They will be releasing the software they developed as open source shortly. This may be of interest to Transpower to investigate.

Australian Power System Security Working Group (PSSWG): Through the Grid Owner we have established a guest invite to PSSWG chaired by AEMO. This is a forum for transmission System Operators to discuss matters related to real-time operation and power system security of the National Electricity Market transmission system, including reviews and learnings from power system incidents. Membership includes AusNet Services, Powerlink, AEMO, TasNetworks, ElectraNet and TransGrid. Guest membership includes WesternPower and Power and Water.

## 5.3 Media interactions

We did not issue any media releases during the month. However, statements made by EGM Operations in a June media release focussing on the Security of Supply Assessment were reused for a New Zealand Herald story about new connections to the power system. The EGM Operations also provided statements in response to questions asked by Newsroom for a story they ran about contingent hydro storage.

# 6 Project updates

Progress against high value, in-flight market design, service enhancement and service maintenance projects are included below along with details of any variances from the current CAPEX plan.

## 6.1 Market design and service enhancement project updates

There are no market design or service enhancement projects in-flight.

## 6.2 Other projects and initiatives

Ancillary Services Cost Allocation System (ASCAS): This project is delivering a new software (ASCAS) replacing previous end-of-life tech vital to accurate information sharing with the Authority and NZX. The project remains on schedule. For milestone 2 - Release 1 features have been deployed in staging environment and handed over to Business for UAT. Integration with Meter Data Management System (GMMS) and NZX are in the process of being build and tested.

SCADA Habitat and EMP Refresh: This project is to upgrade critical components of the SCADA system and Market Solvers, to ensure operational integrity of the System Operator's market system tools into the future. A BCA has been submitted for approval to reflect changes in the commissioning timeline and scope. System Integration Testing has been successfully completed, and System Acceptance Testing is now underway. SPD Regression Testing is also progressing in preparation for the upcoming audit. Concurrently, the build and configuration of environments for subsequent project phases continues. Business subject matter experts have started briefing their teams on the solution and current project status, with regular updates planned to ensure all impacted user groups remain informed and engaged.

Control room of the future (CRoF): During August we continued to support the development of System Operator strategy and preparing for engagement with internal and external stakeholders as appropriate.

# 7 Technical advisory hours and services

| TAS Statement of Work (SOW) | Status | Hours worked during month |
|---|---|---|
| TAS 108 – Extended Reserves implementation | In progress | 0.0 (SME) |
| | | 4.0 (PM) |
| TAS 121 – Future Security and Resilience | In progress | 115.0 (SME) |
| | | 28.0 (PM) |

| TAS Statement of Work (SOW) | Status | Hours worked during month |
|---|---|---|
| TAS 122 – Investigation into implementation options for an MVP Emergency Reserve Scheme | In progress | 21.5 (SME)<br>3.0 (PM) |

Note: Total combined baseline hours for the above TAS' is 2,035.5 hours and the total forecast hours is 1,835.5 (including PM time).

**Progress:**

TAS 108 Extended Reserve Implementation 23/24 – Extended Implementation: Wellington Electricity informed the System Operator they completed their AUFLS transition early August 2025. Unison transition work is progressing as planned to be completed in October 2025.

TAS 121 FSR Workstream - Part 8 of the Code - Common Quality Requirements: In August, the TAS SOW received formal approval. The System Operator team advanced preparations for the CACTIS consultation, incorporating initial feedback from the Authority's CQ Information Sharing Code Amendment process. Collaboration with the Authority also progressed on defining the scope for BESS AOPOs and hybrid arrangements, with work now underway. Final reports for Low Inertia and System Strength Phase 1 were submitted following feedback from the CQTG and the Authority, and the team continues to support the Authority's upcoming Code Amendment Proposals. Separately, the SO completed an internal review of the FSR Roadmap, with outcomes presented to the Authority's Policy Operations and FSR teams for consideration.

TAS 122 – Investigation into implementation options for an MVP Emergency Reserve Scheme: This TAS was formally launched on 22 August 2025 following the signing of the SoW. Its purpose is to explore implementation options for a Minimum Viable Product Emergency Reserve Scheme, targeting potential deployment by May 2026. The System Operator has initiated workshops with key SMEs and the Authority to define the MVP, after which a preferred option will be selected and design work commenced. The project will culminate in a recommendations paper outlining conceptual designs, rationale, detailed design, cost, and timeline.

# 8 Risk and assurance

## 8.1 Risk Management

We provided an updated Risk Register to the Authority's Market Operations Committee and discussed our plans for reporting against key risks. This was well received, and we are working on a report to provide going forward.

## 8.2 Business assurance audits

We are agreeing the scope with our auditors for our first audit of four this year, black start test planning, and have drafted the scope for the second, preparedness for space weather events.

# 9 Compliance

We continued to receive and respond to the Authority's questions about Waipā Networks' late submission of 2024 AUFLS profile information. On 5 August the Authority indicated that there was nothing further for the System Operator to clarify on this matter. We also responded to further questions from the Authority on a breach that we self-notified in February - this breach (incorrect conductor rating modelling in Market System and EMS) is the only current breach against the System Operator that has not yet been decided by the Authority. All other System Operator breach allegations to date have now been closed with no further action taken against the System Operator.

We have completed the AUFLS compliance report (2024 calendar year) for both NI and SI following submission of the data from providers. Our final report was submitted to the Authority on 29/08/2025 and captures our compliance assessment of all matters concerning AUFLS including blocks armed during 2024 and progress on testing. The report also includes an assessment of whether the provision for each island was sufficient to arrest frequency and avoid subsequent over-frequency. We await the Authority's response regarding our assessment, and we are ready to engage with the Authority on feedback on the report and on next steps for non-compliances. Most AUFLS providers, including the Grid Owner, were non-compliant to some degree.

# 10 Conflicts of Interest

We have two open items in the Conflict of Interest Register (below). These are being actively managed in accordance with our Conflict of Interest procedure.

| ID | Title | Managed by |
|---|---|---|
| 40 | General System Operator/Grid Owner dual roles: This is a general item that will remain permanently open to cover all employees with a dual System Operator/Grid Owner role. This item documents the actions necessary to ensure impartiality in these circumstances; these items will be monitored to ensure their continue effectiveness. | Corporate Counsel, Compliance and Impartiality |
| 41 | General relationship situation: This is a general item that will remain permanently open to cover all potential conflicts of interest arising under a relationship situation. This item documents the actions necessary to prevent an actual conflict arising and will be monitored by the System Operator Compliance & Impartiality Manager to ensure their continued effectiveness. | Corporate Counsel, Compliance and Impartiality |

# 11 Impartiality of System Operator

This section covers specific activity this month that involved internal information barriers in place, the separation of key roles and functions, and oversight by Corporate Counsel, Compliance and Impartiality.

[redacted]

HVDC Runback: (11 July 2025). We have continued to manage the conflict of interest as discussed with the Authority while progressing our engineering investigation into this UFE.

South Island AUFLS Compliance: During August we received the final test results for the Grid Owner AUFLS relays which we are now assessing. We will continue to monitor outstanding South Island test results that the Grid Owner is collecting from EDBs.

AUFLS 2024 Compliance Assessment: The 2024 Compliance Assessment mentioned above includes compliance by the Grid Owner.

# 12 Performance and monitoring

Our System Operator performance against the performance metrics for the financial year as required by SOSPA 12.2 (e) will be provided in the final monthly report each quarter.

System Operator Annual Self-review: On 29 August we submitted our 2024/25 Self Review to the Authority which has published the document on their website. It is a significant annual undertaking to pull together this overview of the System Operator's delivery and performance throughout the previous year, delivery of which is a Code requirement. The Authority will use the information as part of their annual review of the System Operator performance for 2024/25.

# 13 Actions taken

The following table contains a full list of actions taken this month regarding the System Operator business plan, statutory objective work plan, participant survey responses and any remedial plan, as required by SOSPA 12.2 (c).

| Items of interest | Actions taken |
|---|---|
| (i) To give effect to the **System Operator business plan** strategic initiative | ***Undertake a full review of the System Operator strategy informed by stakeholder consultation.***<br>We have continued our work on a refreshed SO Strategy. We have completed our preliminary planning including engagement with the Authority MOC on our approach. We are now working on the environment scan.<br>***Support security of supply for the future power system by delivering the SOSFIP review.*** |

| Items of interest | Actions taken |
|---|---|
| | We are currently undertaking a review of the SOSFIP, we are finalising our analysis and have commenced drafting our consultation documents. We remain on track for consultation to commence in late September.<br><br>***Support future-focused market developments through white papers, consultation processes and cross-industry forums***<br><br>We lead and contributed to four Transpower submissions on Authority consultations<br><br>• A regulatory road map for battery energy storage systems<br>• Common Quality Information Requirements (stage 1)<br>• The future operation of New Zealand's power system<br>• Establishing an Emergency Reserve Scheme<br><br>We contributed to Transpower submissions to:<br><br>• Ministry of Business Innovation and Employment's (MBIE) draft Fuel Security Plan ('plan') consultation.<br>• Commerce Commission's Statement of Issues: Huntly Authorisation<br>• Infrastructure Commission's Draft National Infrastructure Plan consultation.<br><br>***Develop and begin implementation of system health, tool and modelling roadmap.***<br><br>We continued our investigation of our power system health monitoring requirements.<br><br>***Continue to deliver modelling process improvements and build maturity of modelling assurance and monitoring.***<br><br>As an extension of the quality assurance initiative, an end-to-end asset modelling process optimisation is now underway. The goal is to embed the foundational quality assurance tools, including the new framework, peer-review checklists, and a reporting dashboard to help monitor the health of the process.<br><br>***Ensure our service keeps pace in an ever increasingly complex world by implementing Control Room of the Future roadmap.***<br><br>In August we continue to support the development of System Operator strategy and preparing for engagement with internal and external stakeholders as appropriate. |
| (ii) To comply with the **statutory objective work plan**: | ***System Operator Forecasting and Information Policy (SOSFIP)***<br><br>*Refer to update in business plan section above.*<br><br>***Policy Statement review*** |

| Items of interest | Actions taken |
|---|---|
| | Weare finalising the scope of changes for the upcoming Policy Statement review, including proposed updates to the Security (Risk and Emergency Management), Dispatch, and Compliance policies.<br><br>***Ancillary Service Procurement Plan review***<br><br>We submitted an updated version of the draft Ancillary Services Procurement Plan to the Authority on 11 July. The Authority approved the updated version submitted and the new procurement plan will come into effect on 7 August.<br><br>We have been working to incorporate relevant changes into our contract documents.<br><br>***Reset SO Strategy***<br><br>*Refer to update in business plan section above.* |
| (iii) In response to participant responses to any **participant survey** | In response to feedback from the 2024-25 survey question "***The Market Services team are doing a great job with the weekly Insights piece, but it needs more prominence.***"<br><br>We're pleased to hear the Insights are valued, and we agree that increasing their visibility is important. We are exploring ways to increase the awareness of our Market Insights such as via our fortnightly System Operator Forums, or other communications channels. This will help ensure the insights reach a wider audience and continue to support informed decision-making.<br><br>We also include a feedback survey at the bottom of each Insights email, and moving forward, we'll incorporate this into the forum discussions as well. This will help us gather more targeted feedback and better understand what the industry finds most useful. |
| (iv) To comply with any **remedial plan** agreed by the parties under SOSPA 14.1 | *N/A – No remedial plan in place.* |

# Appendix A: Discretion

There have been no instances of discretion applied for the month of August.

# Appendix B: Forecast v real-time residual variability

The below figure highlights the variability of the differences between 30-minute forecast values from the Non-response Schedule Short (NRSS) and 5-minute dispatch values from Real Time Dispatch (RTD). This variability is measured as the difference between the forecast requirements on non-intermittent generation (30 minutes ahead of time) versus the requirements on non-intermittent generation during real-time dispatch. Therefore in addition to load and intermittent generation forecast errors, the variations also capture the intra-trading period variability i.e. the difference between half-hour average quantities (as used in the forecast schedules) vs 5-minute quantities (as used in RTD).

We monitor the percentage of the time where the error between what has been dispatched and what is forecasted to dispatched is less than 200 MW. Last month, this error was less than 200 MW 97.82% of the time. This indicates that entering a trading period with ~200 MW of Residual provides a high chance of having sufficient dispatchable market resources to meet variability between the 30-minute ahead forecast and the requirements within the trading period. We monitor this variability and how it compares to the residual threshold to understand trends and inform any future updates of this threshold