



TRANSPOWER

Monthly System Operator performance report

**For the Electricity Authority
Report period: March 2026**

Report Purpose

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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1 Key points this month

Operating the power system

- On 2 March we identified a trend where several intermittent generators were not complying with their Forecast Offer Generation Potential (FOGP), sometimes exceeding the 10MW lenience threshold. This has been brought to the attention of the Authority who are investigating.
- On 25 March MetService issued multiple severe weather warnings across New Zealand. A response channel was set up to capture intelligence and coordinate a response if required, though the weather event passed through with fewer impacts than anticipated.

Security of supply

- *Security of Supply Forecasting and Information Policy (SOSFIP) review*: Work continues to implement the new SOSFIP, which takes effect on 1 May 2026, including developing and testing the new contracted thermal fuels scenario.
- *Energy Security Outlook (ESO)*: The March update included an increase to gas storage, contracted gas reallocation from industrial users and updates to planned outages and generator commissioning projects. The risk curves decreased moderately in both 2026 and 2027. National hydro storage decreased through March to 100% of the historic mean due to increasing demand and lower than average inflows.
- *New Zealand Generation Balance (NZGB)*: NZGB margins remain healthy until May. However, over winter under the 'firm generation' scenario indicates that if demand is near the 99th percentile and a large unit was to go on unplanned outage the system will be relying on high levels of variable resources or the market to co-ordinate the operation of slow start thermal units.
- *Security of Supply Assessment (SOSA) 2026*: We continued to progress the draft SOSA 2026 for consultation in April. It will include updates to gas sensitivities including a very low gas sensitivity and a sensitivity which models LNG gas imports. We are also evolving the format of the document, with the final report to be published by the end of June.

Investigations

- *Under-frequency event investigations*: In March we submitted our causer report for the 23 October 2025 afternoon event, progressed our report for the 21 December 2025 event which we will submit to the Authority in April, and have initial information to progress our investigation into the 4 February 2026 event.

Supporting Asset-owner activity

- *Outage Coordination*: During March short notice outage volumes increased from around 30 a month to 50 a month against a backdrop of a decreasing 12 month rolling average trend. To ensure this increase does not turn into a trend this will be a subject of conversation and actions in the joint Grid Owner and System Operator outage optimisation May meeting. However, bundling more work into each outage continued to rise meaning fewer outages for the same amount of work on the grid.
- *Generator commissioning and testing*: Through March we supported the commissioning of Contact Energy's Glenbrook BESS (100 MW) and prepared for Mercury Energy's Kaiwera Downs 2 wind farm (150 MW), Solar Bay and Maungaturoto Solar Farm Project's 'Golden Stairs' Solar Farm at

Maungaturoto (17.6 MW), Aquila Clean Energy Asia Pacific's Omeheu Solar Farm in Edgecumbe (27 MW), and BrightFern Energy's Dannevirke solar farm (19 MW) which are due to begin commissioning in April 2026.

- *Ancillary Services activity:* Our range of initiatives focussed on Ancillary Services process optimisation is already resulting in procedural improvements, as well as reductions in outstanding provider data, processing times, and overdue testing.

Commitment to evolving industry needs

- *System Operator Strategy refresh:* We held workshops with key industry participants and internal workshops in March as we started to develop our draft Strategy document for a second consultation phase anticipated in June.
- *Policy Statement Review:* We have been working with the Authority on their feedback to our Policy Statement review, and now expect to commence consultation on the draft amendment proposal in April.
- *Industry Exercise 2026:* On 5 March we held an educational webinar on space weather and our industry response to increase understanding in preparation for Industry Exercise itself which is focussed on an extreme geomagnetic storm
- *Evolving markets resource co-ordination - Tie-breaker provisions:* Three tie-breaker solutions are in progress. We remain on track to implement the tie-breaker solution by June 2026 and are currently progressing the SPD audit process. We await the Authority's decision on a 1c IG offer floor Code change proposal, and are working to implement an enhanced market node constraint solution to improve operable dispatch of geothermal generation during Wairakei Ring outages.
- *Interim BESS Solution:* As an interim solution to avoid infeasible dispatch instructions to BESS we are working to implement a solution in SPD. The change will model a battery as a matched pair of market nodes: one charging node and one discharging node. SPD will identify these pairs using market node naming and network connectivity information, and applies a binary constraint so that, for each pair, SPD can schedule either charging or discharging, but not both simultaneously.

Risk & Assurance

Risk management: The current round of CSA interviews has begun, this evaluates five critical controls. Interviews and the recommendations to the SLT will be completed by the end of May. The reports will be finalised mid-June.

- *Business assurance audits:* The final report for the 'Preparedness for space weather events' audit has been completed and recommendations made by the auditor already implemented. The draft report on 'Managing rolling outages during a security of supply event' audit is in progress, and close to appointing an auditor for the final audit, 'Simultaneous Feasibility Test (SFT) application testing component of the SCADA EMS environment refresh'.

2 Operating the power system

2.1 System events

Event Date	Event Name	Event Activity
2 March 2026	Intermittent Generation dispatch non-compliance trends	Trends were identified with several Intermittent Generators not complying with their Forecast Offer Generation Potential (FOGP). This can affect the quality of real-time dispatch and power system security outcomes and create additional workloads within the control rooms to manage. It was observed FOGP was not aligning with central forecasting values, and in some instances exceeded the 10MW threshold of lenience (FOGP vs. Actual). This was brought to the Authority's attention by the Market Operations team, who (EA) are now investigating further.
25 March 2026	Severe weather event – North Island	On 25 March MetService issued multiple severe weather warnings across New Zealand, including Red Heavy Rain Warnings in Northland. A response channel was set up to capture intelligence and coordinate a response if required. However, the grid rode through the weather event with minimal impact, other than an auto-reclose of the Bunnythorpe-Brunswick-1 and Bunnythorpe-Brunswick-2 circuits.

2.2 Market operations

Forecast v real-time residual variability:

In March more than 97% of the variability was covered by the 200 MW residual threshold.¹ 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.

3 Security of supply

Security of supply forecasting and information policy (SOSFIP) review:

On 27 February the EA [announced](#) its decision to approve our SOSFIP amendment proposal. The new SOSFIP will take effect on 1 May 2026. The Markets team are continuing work to implement the

¹ 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.

changes into tools and processes, including developing and testing the new contracted thermal fuels scenario.

Energy Security Outlook (ESO):

Our March [Energy Security Outlook \(ESO\)](#) has been published on our website. Updates this month included an increase to gas storage, contracted gas reallocation from industrial users and updates to planned outages and generator commissioning projects. All three Rankine units are available in 2026 except where outages have already been scheduled. There is a planned Huntly Unit 5 outage in October 2026. The curves have decreased moderately in both 2026 and 2027.

National hydro storage as at 29 March was 100% of the historic mean down from 112% at the start of the month, this is in line with increasing demand and less than average inflows. Our latest weekly market update is also available on our [website](#).

New Zealand Generation Balance (NZGB) potential shortfalls:

NZGB margins remain healthy until May. However, over winter there are negative margins in N-1-G under the firm generation scenario if load reaches the 99th percentile. This means from May, if demand is near or greater than 99th percentile and a large unit was to go on unplanned outage, then the system will be relying on either high levels of variable resources (wind/solar/batteries) or the market to co-ordinate the operation of slow start thermal Rankine units. Margins remain positive for the same scenario through-out winter under N-1. This indicates assuming no major unit was to go on unplanned outage a high winter load should be manageable.

Security of Supply Assessment (SOSA) 2026:

We continue to progress work on our draft 2026 Security of Supply Assessment, which will include updates to gas sensitivities including a very low gas sensitivity and a sensitivity which models LNG gas imports. We are also evolving the format of the document to help improve its accessibility and clarity of key messages. Consultation on the draft 2026 report is planned to commence in April. The final report will be published by the end of June.

4 Investigations

4.1 Under-frequency event (UFE) investigations

23 October UFE (afternoon event): On 13 March we submitted our Causation Report for the 23 October 2025 UFE to the Authority. The System Operator recommended that [REDACTED] is found to be the causer of the UFE due to the reasons outlined in the Causation Report.

21 December 2025 Under Frequency Event: We are completing the causer report for this event and will to the Authority in April. The event involved investigating loss of generation from Tauhara and TOPP2.

4 February 2026: We have received information from participants on this event, which involved an HVDC pole interruption. We are drafting the engineering and causer reports.

4.2 Significant incident investigations

There were no new significant events identified during the reporting period.

5 Supporting Asset-owner activity

5.1 Outage Coordination

The grid owner is the largest asset owner on the power system, they take the most outages and have large market impact to which they have limited exposure to when compared to a generator. We use multiple tools to track the Grid Owner's performance. These include decreasing Short Notice Outage Requests (SNORs), coordinating work crews and work orders to bundle as much work as possible into each outage. This ensures the rest of the market can see outages with longer lead times so they can plan around them and also minimise the number of outages needed reducing their impact. Since undertaking this initiative in July last year:

- The 12-month rolling outage of SNORs has reduced by a third and continued a decreasing trend by dropping another 4% in March, however March saw a rise in SNORs from the typical 30 we are now accustomed to, to 50. This will be raised with the grid owner during the May outage Optimisation joint meeting to ensure this does not turn into a trend. Reducing SNORs frees up more time for the System Operator and Grid Owner to manage risks and give the market more time to manage costs associated with these outages.
- The 12-month rolling average shows how well these bundles are working and the benefit of incorporating work orders and different work crews on each outage. Work order per outage rose 1% flat during March, increasing 11% since July 25. Different work crews per outage did not change during March, and remains up 2.5% since July. These collective bundling of work has led to an estimated reduction of 900 outages, reducing the risks and cost they would have imposed to all asset owners
- Utilising the guideline provided by the Grid Owner, the System Operator continues to manage outage congestion. This keeps workloads maintained within the capacity of the control rooms, decreasing error.

The System Operator Industry Forums are used to engage with the industry to emphasise the top 10 market impacting outages over the coming 4 weeks. Our March forums included the HVDC outages planned in April.

5.2 Generator commissioning and testing

Generation commissioning and testing: Through March we supported the new generation commissioning of Contact Energy's Glenbrook BESS (100 MW) and prepared for Mercury Energy's Kaiwera Downs 2 wind farm (150 MW), Solar Bay and Maungaturoto Solar Farm Project's 'Golden Stairs' Solar Farm at Maungaturoto (17.6 MW), Aquila Clean Energy Asia Pacific's Omeheu Solar Farm in Edgumbe (27 MW), and BrightFern Energy's Dannevirke solar farm (19 MW) which are due to begin commissioning in April 2026.

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

- Mercury Energy's Kaiwera Downs 2 wind farm (150 MW connecting at a new PowerNet substation) commenced commissioning 1 April 2026.
- Solar Bay and Maungaturoto Solar Farm Project's 'Golden Stairs' Solar Farm at Maungaturoto (17.6 MW connected to Northpower) completed stage 1 commissioning in December and is due to complete stage 2 in April 2026.
- BrightFern Energy's Dannevirke solar farm (19 MW directly connecting to the Transpower grid at DVK) is due to begin commissioning in April 2026.
- Aquila Clean Energy Asia Pacific's Omeheu Solar Farm in Edgecumbe (27 MW connecting to Horizon) is due to begin commissioning in April 2026.
- Genesis Energy's Huntly BESS (100 MW connecting to WEL Networks) is due to begin commissioning in May 2026.
- Lodestone's Clandeboye Solar Farm (24 MW connecting to Alpine Energy) is due to begin commissioning in June 2026.
- Harmony Energy's Tauhei at Waihou solar farm (150 MW connected to Powerco) is due to begin commissioning in June 2026
- Mercury's Kaiwaikawe Wind Farm (77 MW connected to Northpower) is due to begin commissioning in July 2026.
- Contact Energy & Lightsource's Kōwhai Park Solar Farm at Christchurch Airport (170 MW connecting to Orion) is due to begin commissioning in July 2026.
- Meridian's Ruakākā Solar Farm (130 MW directly connecting to the Transpower grid at BRB) is due to begin commissioning in October 2026

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

NZ Steel and Fonterra Whareroa

We have worked with NZ Steel to help commission their STATCOM and Arc Furnace at Glenbrook, and with Fonterra/Simply Energy on Whareroa load.

In July 2026, Fonterra will become a direct connect transmission customer at Hāwera with their Whareroa dairy factory. We expect the majority of embedded generation at this site to cease (~10 MW may remain). Process driven demand of up to 80 MW will come online with the electric boilers.

We have made a formal request to the Electricity Authority for that HWA1101 and HWA1102 be classified as non-conforming. The EA have begun their internal process to consider that request.

We continue to work with Fonterra and Simply Energy to ensure they will have a process to submit bids and to ensure the remaining generation at Whareroa is offered separately to the market. We will have modelling to facilitate the load bids, and the generation offers for Whareroa, which will be included in the generator commissioning and testing section from next month.

5.3 Ancillary Services activity

We continue to progress the delivery of our ancillary services process optimisation project, with the current phase scheduled to continue until the end of June. Work is already identifying and implementing procedural improvements as we map end-to-end processes, customer experience enhancement and digital workflow and automation.

Good progress has been made with automation of IL performance analysis in response to UFE's, with the new process now tested and to be implemented which will significantly improve processing times. The next step is to apply this across the backlog of UFEs and follow up with ancillary service agents if any underperformance is discovered. Supporting this IL performance analysis has been improvements in tracking and managing providers UFE response data, reducing overdue levels.

Work on the deferred Ancillary Service Procurement Plan changes is progressing, with stakeholder meetings having commenced.

Setup continues with a new ancillary services provider. There have not been any ancillary service contract variations within the reporting period.

Interruptible Load (IL):

The following table provides an overview of IL testing activity by the number of sites tested and associated additional quantities for those sites. Work is ongoing to review the performance of reserves service providers against contractual requirements during recent UFE's.

	Number of sites	Additional quantities in MW	
Annual testing	0 sites	N/A	
Additional resource	0 site	0 MW FIR	0 MW SIR
Removal of resources	0 sites	0 MW FIR	0 MW SIR

Generation Reserve (GR):

The following table provides an overview of GR testing activity.

	Number of units overdue
Testing	1

Over-Frequency Reserve (OFR):

The following table provides an overview of OFR testing activity. We are actively working with Participants and our internal teams to address these overdue testing requirements and expect to reduce these figures in coming months.

	Number of units overdue
Four yearly end-to-end relay testing	2
Two yearly control and indication testing	9
Circuit breaker testing	21

6 Commitment to evolving industry needs

System Operator Strategy development:

Work on the SO Strategy in March has focussed on further engagement with key industry participants as we also consider feedback from the initial consultation process. We held a series of internal workshops and presented to the ENA's Innovation forum. These engagements are informing prioritisation of the key areas of focus as we develop our draft SO Strategy document for a second consultation, planned to commence this financial year.

Policy Statement review:

We are waiting for feedback from the Authority team on one item, and consent to consult. We now expect to commence consultation on the draft amendment proposal in April.

Pan-Industry Exercise:

On 5 March, the Electricity Authority and Transpower hosted a webinar to prepare for this year's Industry Exercise. The session explained space weather's impact on New Zealand's electricity system and discussed industry response and clear communication, including NEMA messaging. Over 40 participants joined, with additional organisations registering as observers. The next briefing is scheduled for 12 May, outlining exercise expectations; the exercise itself will take place on 20/21 May.

Evolving markets resource co-ordination - Tie-breaker provisions:

There are three tie-breaker provisions at various stages of development:

- Tie-breaker: will apply a transparent and consistent method to tie-break the marginal tranche of equally priced generation at a market node where not all generation is dispatched (whether due to a network constraint or because prices are very low). This is expected to apply at connections to the grid where there are multiple solar generators behind a local constraint that binds when the sun shines (say). Following consultation with industry completed in 2025 we remain on track to implement the tie-breaker solution by June 2026 with the SPD audit in progress.
- 1c Intermittent Generation offer floor: would prevent all Intermittent Generation from offering at \$0, while allowing other generation such as geothermal to offer lower (at 0c). This is intended to reduce the emerging need for inflexible generation to use the Code-prescribed process (Clause 13.82) to avoid inoperable dispatch instructions through the application of System Operator discretion. An example of this is where geothermal and solar are embedded behind a local network constraint that binds when solar is high and demand low. The Authority has recently consulted on the Code change and we await its decision. A submission from Kakariki Renewables identified the need for a more comprehensive market design solution. We have subsequently written to the Authority setting out the challenges we are experiencing, and that we see the Code change as an important interim solution because the more comprehensive solution will take longer to be developed and implemented.
- Market Node Constraint: this initiative is designed to address the problem associated with Wairakei Ring transmission outages when there are multiple geothermal generators needing to remain at their respective minimum feasible level of operation. This change removes the need for coordinators to manually adjust the constraints every time the minimum output at each generator changes.

Interim BESS solution:

As an interim solution to avoid infeasible dispatch instructions to BESS we are working to implement a solution in SPD. The solution (Option B in TAS113) will model a battery as a matched pair of market nodes: one charging node and one discharging node. SPD will identify these pairs using market node naming and network connectivity information, and apply a binary constraint so that, for each pair, SPD can schedule either charging (DD/IL) or discharging (generation), but not both simultaneously. This will prevent the invalid solution (discharging and scheduled for DD/IL) while still allowing charging and scheduled for IL+TWD. The changes are confined to SPD only, which will go through the normal SPD audit process.

Electricity Networks Aotearoa (ENA) Future Networks Forum (FNF):

The Future Networks Forum (FNF) working group (in which the System Operator is represented) and the Authority met twice in March. The Authority provided updates on their progress towards publication of a DSO Roadmap paper for feedback from industry. The working group continues to provide a valuable channel for cross-industry engagement on this important topic.

6.1 Connecting with the industry

System Operator Industry Forums:

We ran two industry forums in March. This first forum included news on our new Demand Allocation Tool (DAT), and the second featured information on management of Low Southland hydrology. 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 Report](#) provides information to assist interested parties' understanding of the current security of supply situation² 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 follows³:

- 1 March - Understanding Standby Residual Checks (SRC)
- 8 March - The Spring Washer Effect and High Hawke's Bay Prices
- 15 March - Ruakākā Battery in NZ wholesale electricity markets
- 22 March - Recent Load Control Testing
- 29 March - Northland solar generation curtailment and dispatch tie-breakers

6.2 Supporting the Authority

Intermittent generation central forecasting project:

In March we had dialogue with the Authority's market monitoring team about Forecast of Generation Potential (FOGP) monitoring. The purpose of the exchange was to confirm what monitoring the Authority was undertaking and to share recent examples of FOGP which had caused operational issues. We are awaiting confirmation from the Authority's market monitoring team that the FOGP examples

² As required by the Security of Supply Forecasting and Information Policy section 11, incorporated by reference into the Electricity Industry Participation Code 2010

³ Past Market Operations Weekly Reports including our weekly insights can be viewed on our website.

we highlighted were captured by their routine monitoring. We will continue to work with the Authority on the monitoring of FOGP.

TSO:DSO white paper

In March we shared with the Authority that we are writing a white paper on TSO:DSO with a goal of setting out potential no regret next steps. In line with our SOSPA obligations, we will share a draft of our paper prior to publication and we will continue to liaise with Authority staff.

SOSPA transition update:

The final Joint Work Planning Team (JWPT) terms of reference were agreed by both parties and approved by the System Operator in March. Pending the Authority's formal approval, this will conclude the final outstanding action of the SOSPA3 transition process.

6.3 Media interactions

The only media enquiries that we received in March were the potential impact on the power system of increased EV uptake as a result of escalating petrol prices and of the datacentre that Datagrid plans to build in Southland.

<https://www.thepost.co.nz/business/360951273/fast-track-ruling-lowering-lake-pukaki-expected-july>

7 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.

7.1 Market design and service enhancement project updates

Emergency Reserve Scheme (ERS):

The Authority confirmed delivery of an Emergency Reserve Scheme (ERS) as a Market Design investment. The ERS is a new ancillary service intended as a penultimate (before instructed load shedding) resource to mitigate potential shortfall events. The Code change establishes the new ancillary service. The technical and commercial terms for potential ERS providers are yet to be developed, including through a co-design with industry approach that will inform a proposal to amend the Procurement Plan. We expect to issue an EOI to establish an advisory group soon, and plan to engage an independent facilitator/Chair including to ensure we appropriately balance our own needs and perspectives with those of industry, consumers and potential ERS providers.

In parallel, tool and processes design is progressing. The Authority has clarified that the real-time price outcome expected during any ERS activation event should be the same prices that would have resulted without the ERS (which may or may not be scarcity prices). We continue to engage with the Authority as tooling options are better understood. We continue to develop design detail, and consequently material uncertainty of cost and time requirements remains.

We are working to develop a funding proposal covering tooling, processes, policy, procurement and ongoing costs.

Ancillary Services Cost Allocation System (ASCAS):

This project will deliver new software (ASCAS) to replace previous end-of-life technology which is vital to accurate information sharing with the Authority and NZX. The project remains on schedule. User acceptance testing of Milestone 3 features are nearing completion and a further two testing rounds are planned prior to the next production release in June.

The tooling change portion of the IR Cost Allocation solution will be delivered as part of this project with a go-live date of 1 October 2026. The business case to support confirmation of Authority funding for this Market Design project has been completed in March.

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. Business sign-off to go live has been received. The cutover to EMP 3.4 was successfully completed, with operational cutover achieved on 04 March and overall system stability maintained. The project has now transitioned into post-cutover support and stabilisation.

Demand Allocation Tool:

This solution will provide an automated mechanism for the control room to calculate demand limits accurately and equitably for all participants whenever a grid emergency is forecast in the forward schedules. User Acceptance Testing has been completed. Final non-functional and regression testing is underway, while change management activities continue to progress well. A successful external webinar was held on 24 March between members of the Demand Allocation Tool project team and representatives of the Electricity Authority, to answer their questions about the new tool and its planned roll-out. The project is on track for 14 May production implementation.

Operations Comms System Enhancements (OCSE):

Delivery remains on track for the 21 April go-live, with the final build sprint completed and end-to-end testing finalised. UAT is underway, with training preparation progressing in parallel.

Control room of the future (CRoF):

The team is in the process of developing a draft roadmap and dependency analysis for the Control Room of the Future (CRoF) programme to clearly identify and sequence the initiatives required to deliver the highest-priority business outcomes. This work focuses on the top ten outcomes, clarifying key prerequisites, interdependencies, and alignment with existing and planned initiatives. The analysis spans the SOSPA 3, 4 and 5 periods, as well as the current and next RCPs.

8 Technical advisory hours and services

TAS Statement of Work (SOW)	Status	Hours worked during month
TAS 120 – Multiple Frequency Keeping (MFK) Review	In progress	100.5 (SME)
		10.0 (PM)
TAS 121 – Future Security and Resilience	In progress	52.0 (SME)
		14.0 (PM)
TAS 122 – Investigation into implementation options for an MVP Emergency Reserve Scheme	In progress	210.00 (SME)
		27.00 (PM)

8.1 Project Progress:

TAS 120 - Multiple Frequency Keeping (MFK) Review:

In March, the team completed and internally reviewed the draft findings and recommendations report, then submitted the draft to the Authority for preliminary feedback. The Authority raised no significant feedback. The report is now undergoing final internal review and will be submitted to the Authority in April.

TAS 121 FSR Workstream - Part 8 of the Code - Common Quality Requirements:

In March, the Voltage and Frequency Management and Information Sharing Phase 1 Decision papers were published.

The team continued providing support to the Authority completing various consultation papers. In addition, the team and the Authority completed a debrief of the reactive power industry workshop in February and agreed initial next steps as additional scope to be progressed under this TAS for the remainder of the year. A change request was drafted and submitted to the Authority for review and approval.

We are planning changes required to our internal and external facing processes as a result of the Code changes, and communication with Asset Owners.

TAS 122 – Investigation into implementation options for an MVP Emergency Reserve Scheme:

Following completion of the ERS MVP design, the System Operator delivered CR001 to undertake preparatory work on the preferred solution, supporting potential implementation in 2026. The Authority received the TAS report on 22 December, outlining the initial provider scan and required FlexPoint enhancements. Work is now underway on a funding proposal (CR002) covering tooling, processes, policy, procurement, and ongoing costs. In the meantime, work continues to be funded through extensions to the scope of TAS122. Refer to section 7.1 above for more information.

9 Risk and assurance

9.1 Risk Management

Control Self-Assessment (CSA) Round 17: The current round of CSA interviews has begun, this evaluates five critical controls. Interviews and the recommendations to the SLT will be completed by the end of May. The reports will be finalised mid-June.

9.2 Business assurance audits

The final report for preparedness for space weather events has been completed and sent to the Authority. No follow-up actions are required as the recommendations made by the auditor have already been completed.

As part of the audit on managing rolling outages during a security of supply event, the auditors have interviewed EDBs involved in last year's industry exercise. Their feedback is being incorporated into the draft report.

We have requested expressions of interest from three auditors specialising in testing for the final audit, Simultaneous Feasibility Test (SFT) application testing component of the SCADA EMS environment refresh.

10 Compliance

10.1 Code Amendment Request – UFE causer definition

On 27 March 2026, the System Operator submitted a Code amendment request to the Authority regarding the definition of “causer” in clause 1.1(1) of the Code in respect of UFEs. As we have previously discussed with the Authority, we have proposed the removal of the System Operator as a potential causer of UFEs.

10.2 Assistance

We are assisting the Authority’s Compliance Team with its investigation into the Waverley Wind Farm for alleged dispatch non-compliance.

11 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

12 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.

- Internal Audit Plan FY26 Q2: The System Operator Impartiality Review is a review of the framework used for managing the impartiality of the System Operator function. Deloitte have presented us with their key findings and draft report which we are currently reviewing.
- Grid Owner NTS project⁴: The System Operator is providing technical expertise to inform operational assessment of any solutions being considered by the Grid Owner.

13 Performance & Monitoring

Our System Operator performance against the performance metrics for the financial year as required by SOSPA 12.3(a) will be provided in the final monthly report each quarter. Each quarter we report our year-to-date performance against the Performance Metrics and Incentives (PMI) Agreement with the Authority. A quarterly review session is then held to discuss and agree an interim / indicative score. At the end of the financial year we reach a joint determination of our full-year performance, that is used to determine our performance incentive outcome. The final results will be published in our Annual Self Review.

The current year-to-date overall outcome score is 4.30, equating to an 86% performance rating. These results represent our current performance status at this point in the year. Our forecasted end of year score is 4.79 (96%), indicating we are on track to a final capped outcome performance score of 80%. Further details can be found in appendix C of this report.

Quarter 3 interim metrics:

New security and reliability risks are identified and appropriately managed	4.54 O1 Score
Significant events are appropriately scoped, understood, prepared for and managed	4.44 O2 Score
The Authority is supported to evolve and develop the electricity market and power systems	4.00 O3 Score
Relevant market information is made accessible to stakeholders	4.18 O4 Score
Stakeholders are effectively informed on and included in decisions where relevant	3.88 O5 Score
Stakeholders are satisfied with our service	4.71 O6 Score
SOSPA delivery provides value	4.14 O7 Score
Performance Actual %	86%
Overall Outcome Score	4.30
Performance % Score	80%
Incentive Payment	200,000

Score	Level of performance
1	Poor/unacceptable performance, requires focused improvement
2	Partially meets requirements, some improvement needed
3	Performance of all requirements in line with requirements of the Code and SOSPA
4	Exceeds some aspects of what is required by the Code and SOSPA
5	Consistent delivery of exceptional performance of (or beyond) what is required by the Code and SOSPA

⁴ [Transpower seeks innovative transmission alternatives in western Bay of Plenty | Transpower](#)

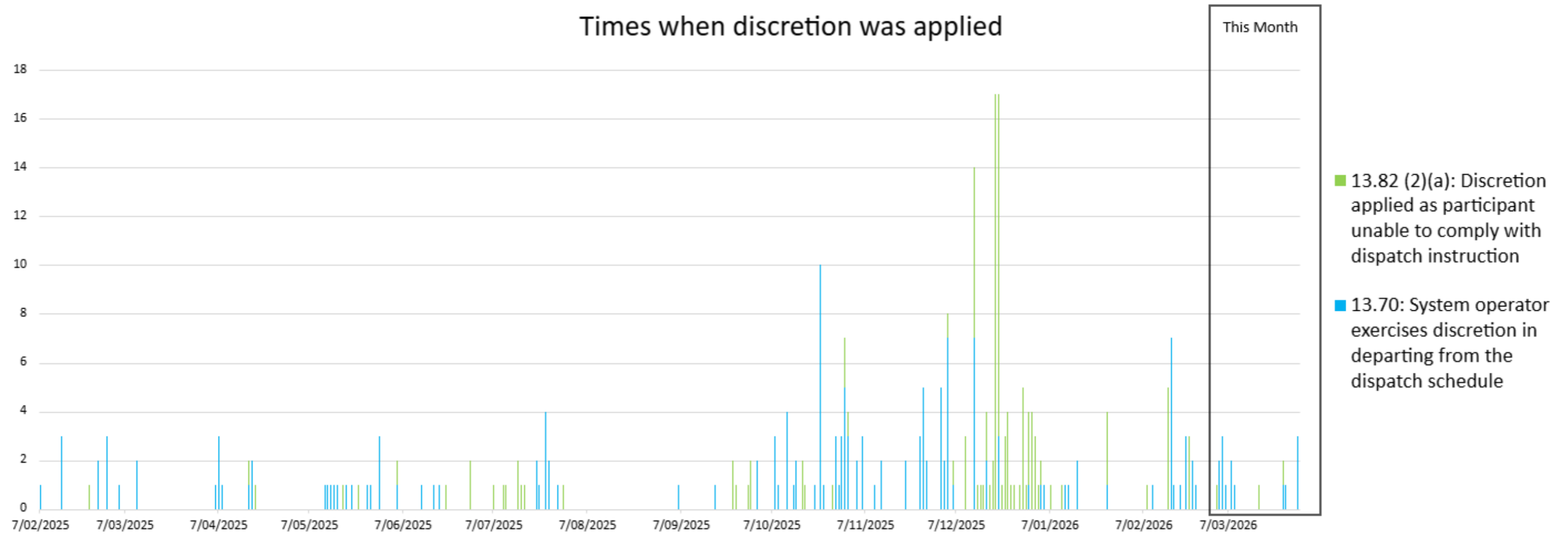
14 Actions taken

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
<p>To give effect to the System Operator business plan strategic initiative</p>	<p>Undertake a full review of the System Operator strategy informed by stakeholder consultation. We have started working on the draft SO Strategy document incorporating feedback from the Key Trends and Issues paper consultation. In March we held more external workshops with key participants and stakeholders to gain further input and internal workshops to prioritise and refine our approach to the strategy for drafting.</p> <p>Support security of supply for the future power system by delivering the SOSFIP review. The Authority announced its decision to approve our SOSFIP amendment proposal, to take effect from 1 May. We continue to progress implementation into our tools and processes, including developing and testing the new contracted thermal fuels scenario.</p> <p>Support future-focused market developments through white papers, consultation processes and cross-industry forums In March we completed the educational webinar on space weather as part of preparations for Industry Exercise 2026. We continued to progress two white papers for release in the coming months. One is intended to set out activities needed to support the developing DSO/TSO transition, that can be progressed. The other is to better understand the security or supply implications of the growing contribution from IG, including to inform the Authority's SSAD review. We have progressed the development of two education pieces, one on outage coordination, and another on power system stability. We have also been preparing our draft SOSA report for consultation in April.</p> <p>Develop and begin implementation of system health, tool and modelling roadmap. We have drafted our initial power system health monitoring requirements and high level roadmap. We are now planning next stage investigations in both quick wins, and in progressing, with the Grid Owner, plans for enhancing high resolution monitoring and assessment.</p> <p>Continue to deliver modelling process improvements and build maturity of modelling assurance and monitoring. 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. We are also building in CACTIS timeline requirements into the improvements.</p>

Items of interest	Actions taken
	<p>Ensure our service keeps pace in an ever increasingly complex world by implementing Control Room of the Future (CRoF) roadmap.</p> <p>We continue developing a draft roadmap and dependency analysis for the Control Room of the Future (CRoF) programme to clearly identify and sequence the initiatives required to deliver the highest-priority business outcomes. This work focuses on the top ten outcomes, clarifying key prerequisites, interdependencies, and alignment with existing and planned initiatives. The analysis spans the SOSPA 3, 4 and 5 periods, as well as the current and next RCPs. We will present the draft roadmap to the CRoF governance group for direction in April 2026.</p>
<p>To comply with the statutory objective work plan:</p>	<p>System Operator Forecasting and Information Policy (SOSFIP) Refer to update in business plan section above.</p> <p>Policy Statement review We have been working with the Authority as they provide feedback on the draft policy statement and will now look to commence consultation on the draft amendment proposal in late April.</p> <p>Procurement Plan We have been engaging with participants on their 2025 Procurement Plan consultation feedback on the items we chose to defer. from the. We will collate all feedback and in accordance to the SOWP deliverable, consider our approach to each item for amendment/inclusion or otherwise to a future update of the Procurement Plan. It is anticipated with the Authority's agreement we incorporate any updates with the expected ERS Procurement Plan amendments anticipated for later in 2026.</p> <p>Reset System Operator Strategy Refer to update in business plan section above.</p>
<p>In response to participant responses to any participant survey</p>	<p>Our participant survey for 2026 opened in March and will run through to late April</p>
<p>To comply with any remedial plan agreed by the parties under SOSPA 14.1</p>	<p>N/A – No remedial plan in place.</p>

Appendix A: DISCRETION



System Operator applied discretion under cl 13.70 in 17 instances:

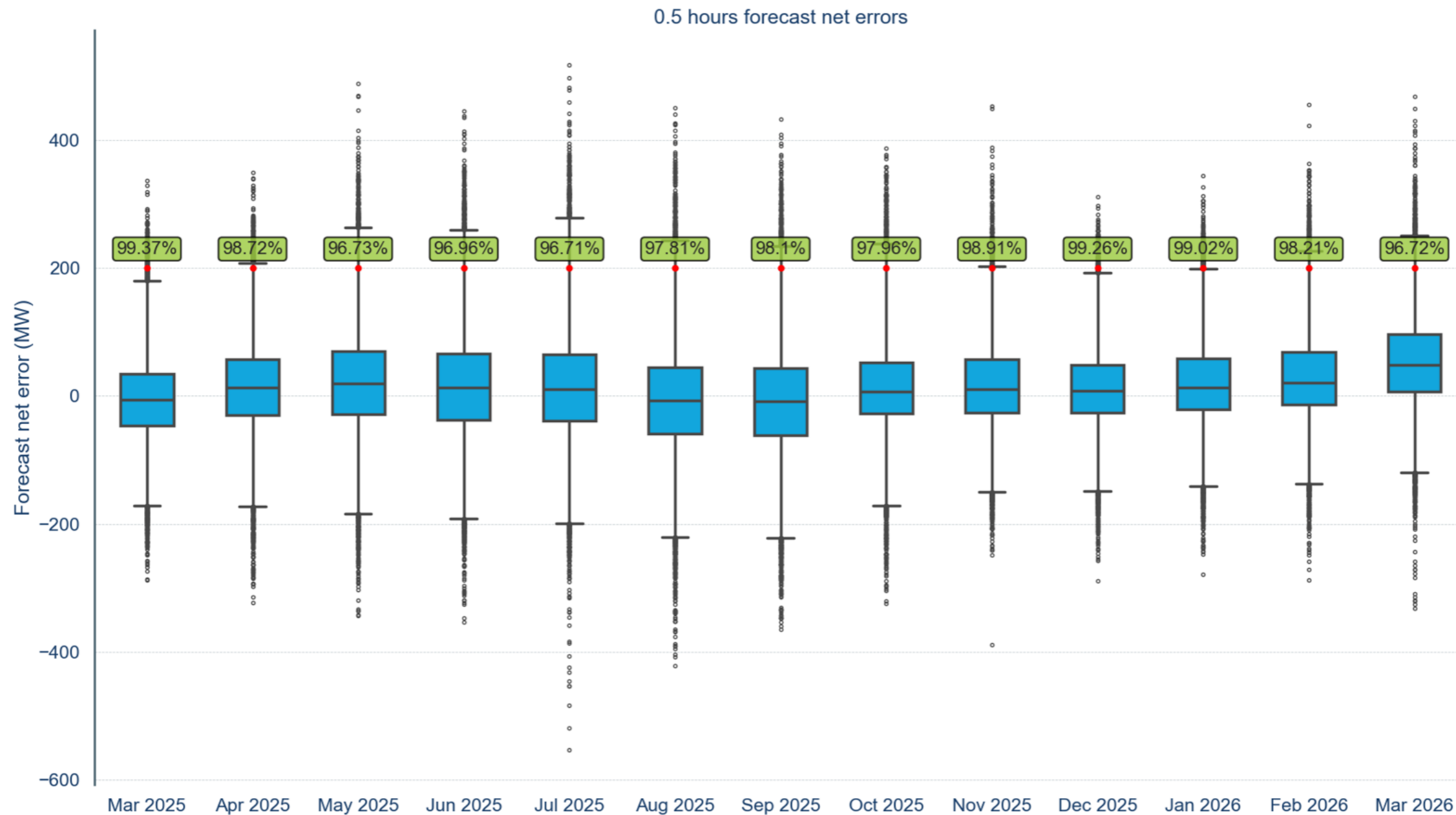
- 1 instance at Stratford 21 (SFD21):
 - 3 March, 1 instance, trader claimed 13.82(2)(a) for plant safety
- 2 instances at Arapuni (ARI):
 - 4 March, 2 instances, due to switching time for HAM_OHW_1
- 6 instances at Bream Bay (BRB):
 - 5 March, 3 instances: 2 instances due to RTCA violations causing too much charging load, 1 instance due to limit charging
 - 8 March, 2 instances: 1 instance to manage contingency, 1 instance clicked discretion in error
 - 9 March, 1 instance, reduced RUK charging to manage BRB_HPI_1 contingency
- 1 instance at Kumara (KUM):
 - 6 March, 1 instance, to manage contingency (VSAT 100%)
- 1 instance at Kaikohe (KOE):
 - 17 March, 1 instance, trader claimed 13.82(2)(a) for minimum run

- 1 instance at Waitaki River (WTR):
 - 25 March, 1 instance, trader claimed 13.82(2)(a) to remain reduced during extended offload and not return to economic dispatch
- 2 instances at Manapōuri (MAN):
 - 25 March, 1 instance, to manage extended offload
 - 26 March, 1 instance, for Line 2 return
- 3 instances at Glenbrook (GLN):
 - 30 March, 3 instances, due to discharge under test plan

Appendix B: 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 96.72% 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.



Appendix C: PERFORMANCE METRICS

Scoring

Quarter 3 scores are shown as shaded cells in the figure below, the year-end forecasts are shown by blue text in a bright blue outline.

A number of the metrics cannot be reported on as they are dependent on actions that will happen later in the year. Of those that have reported, we anticipate the scores to improve as we increase the number of items to be delivered during the year.

Metric	Definition	Q1 score (Jul-Sep)	Q2 score (Oct-Dec)	Q3 score (Jan-Mar)	1	2	3	4	5	N/A
PM1	Risk register has been updated and tested externally with the Authority and widely among industry participants	3	3	3	Internal Risk Register has not been updated in the last 12 months, no engagements have been held to identify new threats or assess current threats	Internal Risk Register has been reviewed and updated internally in the last 12 months	Internal Risk Register has been reviewed and updated internally in the last 6 months	An annual workshop is held with the Authority, OR representatives from a diverse range of stakeholders, to review threats and identify and assess new security and reliability threats	An annual workshop is held with each of the Authority, AND representatives from a diverse range of stakeholders, to review threats and identify and assess new security and reliability threats	
PM2	% of SMART actions from the control self-assessment with maturity ratings of 1 or 2 will be addressed by the planned due date	5	5	5	<50% of SMART actions with a maturity rating of 1 and 2 are completed by due date	≥ 50% of SMART actions with a maturity rating of 1 and 2 are completed by due date	≥ 75% of SMART actions with a maturity rating of 1 and 2 are completed by due date	100% of SMART actions with a maturity rating of 1 and ≥ 75% of SMART actions with a maturity rating of 2 are completed by due date	100% of SMART actions with a maturity rating of 1 and 2 are completed by due date	
PM4	% of actions from industry exercises which were completed on time	N/A	5	5	< 50 %	≥ 50 % and < 65 %	≥ 65 % and < 75 %	≥ 75 % and < 100 %	100%	
PM6	Percentage of actions from significant events which are closed on time	5	5	5	<50 %	≥ 50 % and < 65 %	≥ 65 % and < 75 %	≥ 75 % and < 100 %	100%	
PM7	On time delivery of significant event reports	N/A	4	4	Less than 100% of major preliminary reports delivered on time	All major preliminary reports and 60% of other reports delivered on time	All major preliminary reports and 80% of other reports delivered on time	100% of all reports delivered on time	Score not available	
PM8	Average satisfaction score from stakeholders, as per responses received to transactional surveys taken at forums and asked for in correspondence	5	5	4	< 35 %	≥ 35 % and < 50 %	≥ 50 % and < 70 %	≥ 70 % and < 85 %	≥ 85 %	
PM9	All categories of stakeholders are actively engaged by the system operator throughout the year	N/A	N/A	N/A	SO Annual Participant Survey is not sent to a diverse range of stakeholders	SO Annual Participant Survey sent to a diverse range of stakeholders to request their feedback on how well they believe market information has been made accessible to them	Responses are received from a diverse range of stakeholders and are considered by the SO for improvement of engagement activities	Specific action is taken to build engagement from a diverse range of stakeholders	More than one action is taken as a result of feedback received from the Annual Participant Survey or other industry mechanisms and forums, with the aims of improving engagement with stakeholders	
PM10	% of industry submissions, made in response to system operator consultations, which are responded to	2	4	5	Not all submissions acknowledged	All submissions acknowledged and < 50% responded to	All submissions acknowledged and ≥ 50 % responded to	All submissions acknowledged and ≥ 75 % responded to	All submissions acknowledged and ≥ 90 % responded to	
PM12	Average satisfaction score from stakeholders from Annual Survey	N/A	N/A	N/A	< 73 %	≥ 73 % and < 76 %	≥ 76 % and < 85 %	≥ 85 % and < 89 %	≥ 90 %	
PM13	Average score from stakeholders on their perception of SO impartiality	N/A	N/A	N/A	< 60 %	≥ 60 % and < 70 %	≥ 70 % and < 80 %	≥ 80 % and < 89 %	≥ 90 %	
PM14	Number of thought leadership publications on specific areas of system operator work that affect and/or are of interest to the industry	2	3	3	Score not available	No thought leadership publications or participant education pieces in the financial year	1-2 thought leadership publications and 1 participant education piece in the financial year	3-4 thought leadership publications and 2 participant education piece in the financial year	>4 thought leadership publications and 3 participant education piece in the financial year	
PM16	# of SO Industry Forums held	2	3	4	Score not available	1-10 forums	11-19 forums	20 or more forums	20 or more forums, plus 1 longer format forum	
PM17	% of key SOSPA documents delivered on time to the Authority	3	3	3	< 70%	≥ 70 % and < 100%	100%	SO works proactively with Authority staff to enhance the accessibility of existing content in >50% of key documents	SO works proactively with Authority staff to provide new, value-add content in >50% of key documents	
PM19	TAS project delivery performance	5	3	5	< 40% achieved in the approved time	≥ 40% and < 55% achieved in the approved time	≥ 55% and < 70% achieved in the approved time	≥ 70% and < 90% achieved in the approved time	≥ 90% achieved in the approved time	
PM20	Market impact of breaches remain below threshold	5	5	5	> 4 breaches with market impact > \$50k	4 breaches with market impact > \$50k	3 breaches with market impact > \$50k	< 3 breaches with market impact > \$50k	No breaches with market impact > \$50k	
PM21	Sustained SCADA (Supervisory Control and Data Acquisition) availability	5	5	5	< 99.0% SCADA availability	≥ 99.0% and < 99.90% SCADA availability	≥ 99.90% and < 99.93% SCADA availability	≥ 99.93% and < 99.97% SCADA availability	≥ 99.97% SCADA availability	
PM22	Unplanned dispatch outage - unplanned time spent on Stand Alone Dispatch (SAD).	5	5	5	> 7 unplanned outages or > 300 unplanned minutes on SAD	≤ 7 unplanned outages or ≤ 300 unplanned minutes on SAD	< 6 unplanned outages or < 200 unplanned minutes on SAD	< 5 unplanned outages or < 150 unplanned minutes on SAD	< 4 unplanned outages or < 120 unplanned minutes on SAD	

Key

Shaded square = current score

Blue text and outlines = predicted final score

APPENDIX C (CONT): PERFORMANCE METRICS

Relationship between performance metrics and outcomes

These relationships explain why some performance metrics have a greater influence on the outcomes than others.

Note: Where the score of the performance metric is currently N/A, that performance metric does not contribute to the outcome or overall score.

Performance metric ref	Metric	O 1: New security and reliability risks are identified and appropriately managed	O 2: Significant events are appropriately scoped, understood, prepared for and managed	O 3: The Authority is supported to evolve and develop the electricity market and	O 4: Relevant market information is made accessible to stakeholders	O 5: Stakeholders are effectively informed on and included in decisions where relevant	O 6: Stakeholders are satisfied with our service	O 7: SOSPA delivery provides value	PM contribution to overall outcome score
PM 1	Risk register has been updated and tested externally with the Authority and widely among industry participants	15%	11%	10%		13%			9%
PM 2	% of SMART actions from the control self-assessment with maturity ratings of 1 or 2 will be addressed by the planned due date	15%	11%						6%
PM 4	% of actions from industry exercises which were completed on time	8%	22%						7%
PM 6	Percentage of actions from significant events which are closed on time	8%	22%	10%					9%
PM 7	On time delivery of significant event reports		22%	10%	9%			14%	9%
PM 8	Average satisfaction score from stakeholders, as per responses received to transactional surveys taken at forums and asked for in correspondence				18%	13%	29%	14%	7%
PM 9	All categories of stakeholders are actively engaged by the system operator throughout the year	0%		0%	0%	0%	0%		0%
PM 10	% of industry submissions, made in response to system operator consultations, which are responded to			10%	18%	25%		29%	8%
PM 12	Average satisfaction score from stakeholders from Annual Survey				0%	0%	0%	0%	0%
PM 13	Average score from stakeholders on their perception of SO impartiality				0%	0%	0%	0%	0%
PM 14	Number of thought leadership publications on specific areas of system operator work that affect and/or are of interest to the industry	8%		20%	18%	13%			9%
PM 16	# of SO Industry Forums held		11%	10%	18%	25%			9%
PM 17	% of key SOSPA documents delivered on time to the Authority			10%		13%		29%	5%
PM 19	TAS project delivery performance			20%				14%	5%
PM 20	Market impact of breaches remain below threshold	15%					14%		5%
PM 21	Sustained SCADA availability	15%			9%		29%		7%
PM 22	Unplanned dispatch outage - inplanned time spent on Stand Alone Dispatch (SAD)	15%			9%		29%		7%
TOTAL		100%	100%	100%	100%	100%	100%	100%	100%
Outcome weighting to overall outcome score		20%	25%	20%	10%	10%	10%	5%	