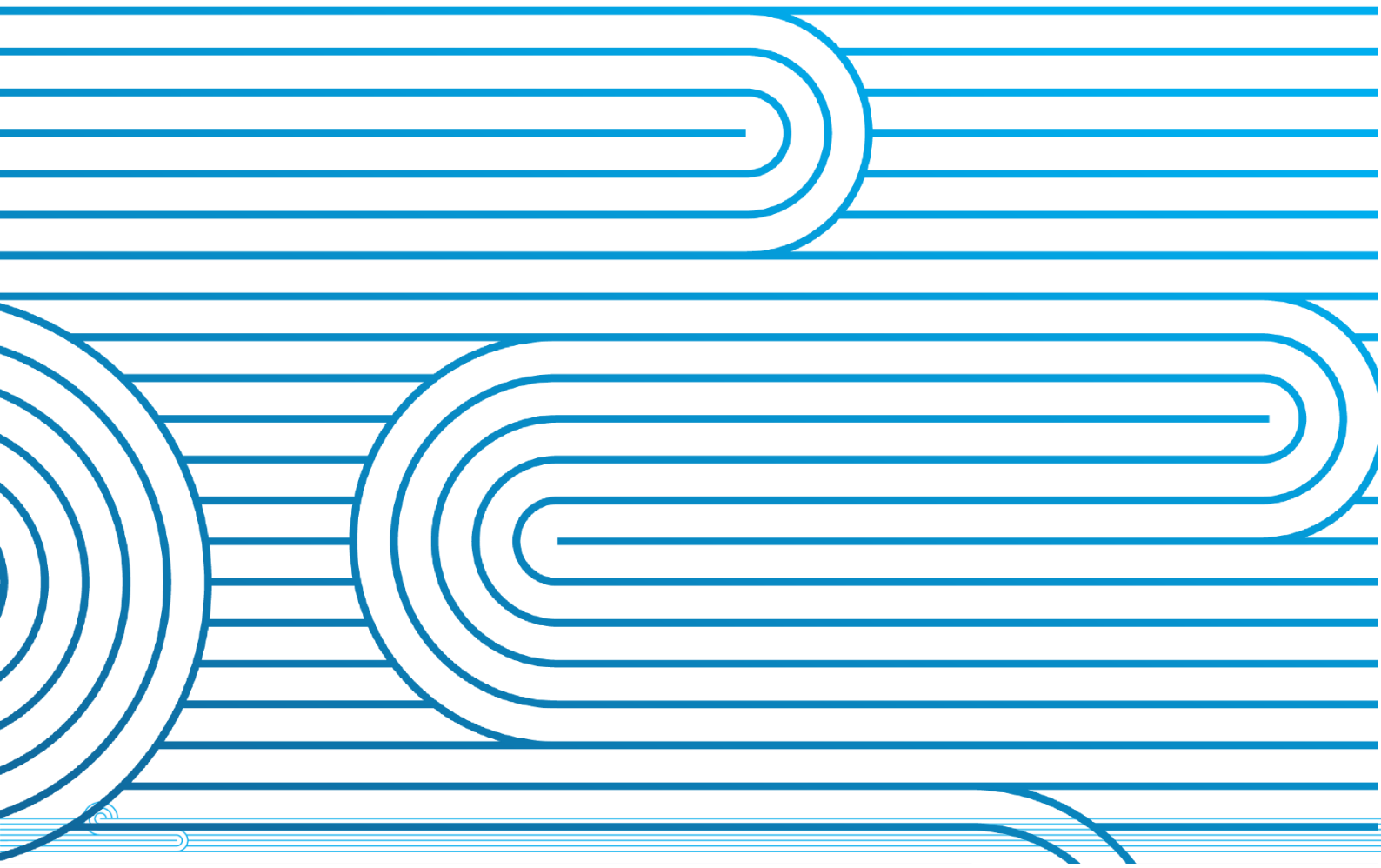


Monthly System Operator performance report

For the Electricity Authority

January 2025



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 System Operator Service Provider Agreement (SOSPA):

12.3 Quarterly reports: The **Provider** must provide to the **Authority**, with each third self-review report under clause 3.14 of the **Code** during a **financial year**, a report on:

- (a) the **Provider's** performance against the performance metrics for the financial year during the previous quarter;
- (b) the actions taken by the **Provider** during the previous quarter:
 - (i) to give effect to the **system operator business plan**;
 - (ii) to comply with the **statutory objective work plan**;



- (iii) in response to **participant** responses to any **participant survey**; and (iv) to comply with any remedial plan agreed by the parties under clause 14.1(i);
- (c) the progress during the previous quarter of:
 - (i) the feasibility study into **cost-of-services reporting** referred to in clause Error! Reference source not found.; and
 - (ii) if agreed in accordance with clause Error! Reference source not found., the implementation of cost-of-services reporting; and
- (d) the **technical advisory hours** for the previous quarter and a summary of **technical advisory services** to which those **technical advisory hours** related.

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.

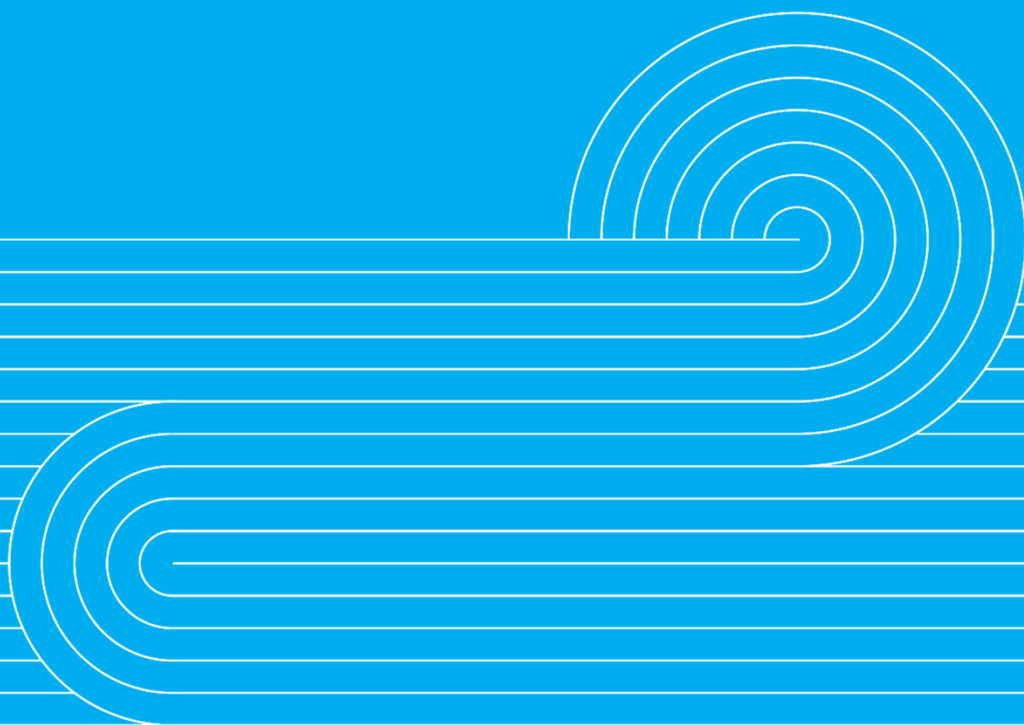
Following the end of each Quarter, a system performance report is published on the [Transpower website](#)



Contents

Report Purpose	2
Key points this month	1
1 Operating the power system.....	3
2 Security of supply.....	4
3 Investigations	5
4 Supporting Asset-owner activity.....	5
5 Commitment to evolving industry needs.....	7
6 Project updates.....	8
6.1 Market design and service enhancement project updates.....	8
6.2 Other projects and initiatives.....	8
7 Technical advisory hours and services	9
8 Risk & Assurance	10
9 Compliance.....	11
10 Impartiality of Transpower roles	11
11 Performance metric and monitoring	12
12 Cost of services reporting	12
13 Actions taken	12
Appendix A: Discretion	17

Commentary



Key points this month

Operating the power system

- On 2 January, in a response to a severe (G4) geomagnetic storm alert from NOAA, and alarms triggering at multiple South Island sites, a Grid Emergency was declared until the storm subsided approximately 3 hours later.
- On 14 January at 10:39, Huntly generation tripped. Frequency in the North Island dropped, triggering an under-frequency event and the use of interruptible load.
- On 30 January, a Grid Emergency was declared due to a generation unit at Matahina in distress. It was removed safely from service but required the disconnection of Pioneer's Aniwhenua generation. A 6 MW loss of supply resulted and was restored by back-feed on Horizon's network.
- On 30 January there was a large scrub fire under the 220 kV transmission lines to the NZAS Tiwai smelter. While the fire was large, assets and supply to consumers were not impacted.
- On 31 January, during a planned outage of Rotorua – Tarukenga 2 circuit, circuit 1 tripped resulting in the loss of supply of 44 MW to Rotorua and disconnection of Wheao generation.
- On 31 January a Haywards circuit breaker mechanically failed resulting in protection tripping nearby filter banks. The event did not impact HVDC transfer limits.

Security of supply

- *Energy Security Outlook:* The January update indicated an increase in the risk forecast for winter due to a decrease in forecast gas and a change in coal stockpile modelling to better reflect the expected drawdown of the stockpile prior to and during the winter months.
- *Quarterly Security of Supply Outlook:* Work commenced on our quarterly seasonal outlook for publication in February, which will highlight contingent storage arrangements and the importance of participants managing the ever-present risks of an extended dry period.
- *Industry Exercise 2025:* In coordination with the Authority, we launched the Industry Exercise communications and opened for registrations, including information on the March webinars.
- *System Operator Rolling Outage Plan (SOROP) review:* The updated SOROP is a key focus of the industry exercise and the first March webinar.
- *Official Conservation Campaign (OCC) development:* Planning is underway to present the OCC concepts to industry communications and consumer experts in February, and participants at the first industry exercise webinar in March.
- *2025 annual Security of Supply Assessment (SOSA):* We progressed our assessment of consultation feedback and initiated the survey asking participants for information about their current and future investment plans in generation, storage, and demand response.
- *Low Residual Situations review consultation:* We collated the feedback from the six submissions and two cross submissions and began to prepare our response.

Investigations

- *14 January 2025 UFE Huntly generation trip:* We are investigating the causer of this event.
- *Significant incident investigation 20 June 2024 - Northland Loss of Supply:* We completed one more action in our response to both the Ray Hardy report and the Authority's report.
- *21 December 2024 significant incident and UFE – Hawke's Bay Loss of Supply:* Our investigation of this 'moderate event' continues along with the related under-frequency event (UFE) investigation which awaits data provision from involved participants.
- *Outage coordination:* Since the start of January outage volumes have dropped back to more typical summer levels. Significant planning effort and industry engagement went into the Te

Mihi – Wairakei outage at the end of January where too much \$0.00 MWh generation was anticipated for the Central North Island demand.

- *Generator commissioning and testing:* Commissioning activities continue for Genesis' Lauriston solar farm (52 MW at Ashburton) and Lodestone's Te Herenga o Te Rā (38 MW near Opotiki), with Meridian's Ruakākā BESS (100 MW) began in January with work also underway on Far North Solar Farm (FNSF) and Aquila's Pukenui Solar Farm (20 MW in Northland). Five existing generation units also completed upgrades by the end of January.
- *Ancillary Services activity:* We are progressing the Ancillary Services Procurement Plan Review. PowerNet are now offering interruptible load into the market.

Commitment to evolving industry needs

- *Very low pricing operational challenges:* Support of the planning for anticipated zero priced generation scenarios during the Te Mihi – Wairakei outage was a focus in January.
- *ENA and Future Networks Forum (FNF):* The project team engaged with Baringa, the supplier chosen to evaluate the industry architecture and models for distribution system operation.
- *System Operator Industry Forums:* The first forum for 2025 held on 21 January with a focus on current operational and market issues.

Risk & Assurance

- *Risk management:* We have been preparing a risk 'deep dive' for the Authority's Market Operations Committee in February focussed on the emerging risk of system stability.
- *Business assurance audits:* We have agreed terms of reference and commenced Audit 50: Commissioning and decommissioning requirements (Power Systems).

1 Operating the power system

System Events

2 January 2025 – Severe (G4) Geomagnetic Storm: At 7:13 in line with process a Grid Emergency was declared after receiving an Alert from NOAA of a severe (G4) storm in progress in conjunction with NER alarms triggering at multiple sites in the South Island. The Grid Emergency was ended at 10:00 after the storm subsided.

14 January 2025 – North Island UFE: At 10:39 Huntly Generation tripped. Frequency in the North Island fell to 49.19 Hz triggering an under-frequency event and the use of interruptible load (IL).

30 January 2025 – Unplanned outage Matahina: At approximately 9:06 a Grid Emergency was verbally declared directly with the affected participants due to the urgent nature of a Manawa generation unit at Matahina being in distress, where the only way to remove it safely from service being to clear the whole Matahina bus. This resulted in the loss of 20 MW of generation from the Matahina unit, the disconnection of 12.5 MW of Pioneer's Aniwhenua generation and around 6 MW loss of supply to local demand. Some supply was able to be back fed to customers through Horizons network. There was some delay to restoration due to investigating concerns raised by Manawa that work they had been doing may have impacted Transpower's 110V system and therefore protection. After it was confirmed that protection was not impacted, normal supply was restored at 13:18 and the Grid Emergency ended at 13:22 and a Grid Emergency Report GEN was subsequently issued.

30 January 2025 – Fire near TWI lines: At 0:57 NZAS advised of a large fire burning under the 220 kV transmission lines connecting the smelter. We liaised with Grid Delivery, FENZ and the local Service Provider to monitor the fire and firefighting efforts (ground and aerial). While this was a large blaze wind conditions were favourable. Our assets were not impacted and there was no loss of supply.

31 January 2025 – Unplanned outage Rotorua: During a planned outage of Rotorua – Tarukenga 2 circuit at approximately 13:53 Rotorua – Tarukenga 1 circuit tripped resulting in a loss of supply of 44 MW to Rotorua and a loss of connection of 6.5 MW of Wheao generation. Rotorua was energised by approximately 14:54, with all local supply back on by 15:10. The cause of the tripping is under investigation.

31 January 2025 – Haywards circuit breaker failure: At approximately 6:01 Haywards circuit breaker 982A connected to Filter 5A mechanically failed resulting in protection tripping Filter Bank 5 (Filters A & B). In order to inspect the damaged circuit breaker the adjacent filter 6A was removed from service by the Grid Owner as a precaution. The removal of these filters did not impact HVDC transfer limits, and by early evening filter 6A was returned to service. The Grid Owner is investigating the failure and taking steps to minimise the risk of failure of any remaining filter circuit breakers.

Market Operations

Forecast v real-time residual variability: We monitor the variations¹ between forecast and real-time dispatch conditions to determine if the 200 MW residual continues to provide sufficient coverage to cater for this variability. Ongoing monitoring enables us to track whether a 200 MW residual is sufficient to cater for this variability or needs a review. In January more than 99% of the variability seen 30 minutes ahead of real-time is covered by 200 MW residual. This indicates that entering a

¹ The variability measure is the same as outlined in Page 11 of our [Low Residual Situation Review Consultation paper](#).

trading period with 200 MW of residual provided a high chance of having sufficient market resources to meet the variability within the trading period.

2 Security of supply

Our [Security of supply webpage](#) collates material we produce under our statutory role² to provide information and near to medium term forecasting on all aspects of security or supply, and manage supply emergencies. It also provides links to the regulatory framework under which we do so as set by the Authority.

Energy Security Outlook: The January update providing the Electricity Risk Curves (ERCs) and Simulated Storage Trajectories (SSTs) is available [here](#). It indicated an increase in the ERCs for winter 2025 due to a decrease in forecast gas production and a change in coal stockpile modelling to better reflect the expected drawdown of the stockpile prior to and during the winter months. None of the SSTs are crossing into NZ Watch or Alert status in 2025.

Quarterly Security of Supply Outlook: Work on our quarterly seasonal outlook commenced in January and is planned for publication in early February. It will highlight contingent storage arrangements and the importance of participants buying their insurance against ever-present risks of a dry period ahead of time this year. Participants need to provide evidence that gives confidence this is happening. A failure to do so exacerbates the potential for very high prices, increases the likelihood the use of contingent storage becomes necessary and disincentivises ongoing investment in maintenance of the thermal generation assets that are needed to support the transition. It also negatively impacts the ongoing productivity and financial sustainability of industrial businesses reliant on access to gas supplies.

New Zealand Generation Balance (NZGB) potential shortfalls: The System Operator does not produce an NZGB report in January, past updates and related information are available on our [Operations Customer Portal](#).

Industry exercise 2025: In coordination with the Authority we launched the Industry Exercise communications and opened for registrations, including information on the March webinars. The exercise on 9 April is to build the sector's capability to implement rolling outages if necessary to manage an extended electricity supply shortage. This year the exercise is preceded by two industry webinars, the first on 9 March will inform participants on the updates to our SOROP following the recent review, and the materials being prepared to support an Official Conservation Campaign if needed; the second on 18 March will focus on preparation for the Industry Exercise itself. Further information can be found on our [Industry workshops/webinars](#) webpage.

System Operator Rolling Outage Plan (SOROP) review: The preparation of material for the Industry Exercise and March webinars continued in January.

Official Conservation Campaign (OCC) development: While more work is still required to fine-tune OCC concepts and finalise rollout plans for when it is needed, we are advanced enough that we are in position to launch quite quickly if an OCC is required. Planning progressed for the 27 February workshop with communications and consumer leads throughout industry to ensure we are prepared for a joined-up response around an OCC and rolling outages, including how we communicate with

² [Electricity Industry Act 2010](#), s8

medically dependent consumers. Sixty communications representatives from 20 lines companies and 12 retailers have registered to attend.

2025 annual Security of Supply Assessment (SOSA): The SOSA will provide a ten-year view (2025 to 2034) of the balance between supply and demand in the New Zealand electricity system. Our 2025 SOSA reference case assumptions and sensitivities consultation closed on 9 December to which we received four submissions. Our consideration of the feedback progressed. On 17 January we sent a survey to industry participants to request information on existing and future investment in generation, energy storage and demand response.

Low Residual Situations review consultation: In response to our [consultation](#) on System Operator coordination of Low Residual Situations we received six submissions and two cross submissions and through January have been working to collate the feedback and prepare our response.

3 Investigations

Under-frequency event investigations

We are investigating the causer of the following events:

- Event Number 4527: 14 January 2025 North Island – Huntly generation trip.
- Event Number 4523: 21 December 2024 – North Island – Loss of supply to the Hawke’s Bay.

Significant incident investigations

20 June 2024 - Northland Loss of Supply: We continue to work on completing actions in response to both the Ray Hardy report and the Authority’s report. We completed one further action at the end of the month and we are on track to complete the next two by the end of March.

21 December 2024 – Hawke’s Bay: Our investigation of this ‘moderate event’ continues. The related under-frequency event (UFE) investigation is progressing in line with the Code based timings for data provision from participants.

4 Supporting Asset-owner activity

Outage coordination

Since the start of January outage volumes have dropped back to more typical summer levels, and Huntly generation is committing to the market in advance of any outages. As a result, workloads, and outage co-ordination activities are back to more typical levels for this time of year.

Although outage numbers have returned to typical summer levels, the Te Mihi – Wairakei outage at the end of January resulted in too much \$0.00 MWh generation in the Central North Island. This required slow ramping geothermal generation to ramp down, which due to market system limitations, needed NCC to utilise discretion and market node constraints to keep them running. Ahead of the outage operational briefings were held with affected parties to outline NCC’s approach to managing security during the outage and provide an opportunity for questions. A CAN was also sent to the wider industry informing them of the situation and NCCs response.

Looking ahead, the annual HVDC outage will take place on the 20 Feb to 8 March, with an initial short outage the first weekend of February to reconfigure the Cook Strait cables. NZGB shows no national capacity issues over this outage or over the next 200 days.

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 3 months:

- Genesis’ Lauriston solar farm (52 MW at Ashburton) is due to complete commissioning by middle of February 2025.
- Lodestone’s Te Herenga o Te Rā (38 MW at Waioatahe) is due to complete commissioning by the end of February 2025.
- Meridian’s Ruakākā BESS (100 MW at Bream Bay) began commissioning in January 2025, due to complete end of April 2025.
- Far North Solar Farm (FNSF) and Aquila’s Pukenui Solar Farm (20 MW in Northland) is due to begin commissioning in March 2025.
- We also had five generation units with upgrades complete commissioning by end of January 2025, including AVR upgrades for Atiamuri, Whakamaru and Manapouri.

Demand commissioning and testing

Edendale load forecast: In December the Authority asked that we withdraw our request for GXP EDN0331 to be assessed as non-conforming and to monitor the performance of the forecast against the GXP demand for a period now that the dairy factory demand is expected to return to a more consistent, though increased, profile. During January we noticed that the load forecast for EDN was inaccurate to the extent that security was impacted as constraints were not being created when required. Feedback will be provided to the Authority that we consider the request should be reviewed and a final determination on whether to classify this node as non-conforming or not should be made.

Ancillary Services activity

PowerNet interruptible load (IL): PowerNet are now offering interruptible load in the South Island having completed their first in January. Interruptible load capability tests remain ongoing in order to increase contracted values.

Simply Energy: Simply Energy will assume responsibility for dispatch of the interruptible load previously sent to Contact Energy. We continue to work with Simply Energy to set up their new dispatch system.

Procurement Plan Review: The procurement plan review continues – details of the scope of the review were included in the December 2024 monthly report. We expect to engage with the Authority in February and March to request the Authority’s consent to consult with industry on the proposed changes to the procurement plan.

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	8 sites	N/A	
Additional resource	3 sites	1.998 MW FIR	2.03 MW SIR

Over-Frequency Reserve (OFR): Two units (one in the North Island and one in the South Island) remain unavailable to provide OFR. We are working with the service provider(s) to resolve this. The following table provides an overview of OFR testing activity.

Number of sites overdue	
Four yearly end-to-end relay testing	0
Two yearly control and indication testing	4
Circuit breaker testing	19

Frequency Keeping: One station in the South Island remains unavailable to provide frequency keeping as a result of failed testing.

Black Start: Planning is underway for Black Start testing at Tokaanu Power Station to occur later in 2025.

5 Commitment to evolving industry needs

Very low pricing operational challenges: A significant amount of effort went in to considering the possible \$0/MWh scenario's for the planned outage on THI_WKM_1 that commenced on 31 January and was scheduled to run through to 2 February, the scenario's highlight the challenges when the amount of generation offered at \$0/MWh exceeds the demand or the regional transmission capacity to export generation. Insights will be shared in the February report. Work also continues to enhance real-time operations, additional updates to the market system are scheduled for delivery in March 2025.

Tie break situations: Now that we have successfully developed a tie-breaking energy constraint in SPD to allocate output proportional to generator's offers and following initial engagement with the Authority on the topic, we have been collating feedback and learnings as we consider next steps for this initiative.

Electrical Industry Space Weather Working Group (EISWWG): The EISWWG continued their engagement but no major developments to report in January.

Electricity Networks Aotearoa (ENA) Future Networks Forum (FNF): We are a member of the 'Roles and Functions' project which has begun Stage 2. During January the project team engaged with Baringa who are the chosen supplier of consultancy services to evaluate the industry architecture and models for distribution system operation (DSO) to fulfil the roles and functions identified in Stage 1. ENA FNF project team meetings are weekly and there is high engagement with the Authority.

Connecting with the industry

System Operator Industry Forums:

Our last fortnightly discussion on current operational and market issues was held on 21 January. Recent slide packs and recordings for forums within the last month are available on our [System Operator industry forum](#) webpage.

Weekly Market Movements:

- [12 January](#): This insight covered holiday load profiles and how demand tends to drop considerably over holiday periods.
- [19 January](#): This insight discussed the spike in prices following the 14 January Under-Frequency Event.
- [26 January](#): This insight looked in to changing load profiles and how regional load profiles have deviated from their typical shape.

Supporting the Authority

Intermittent Generation Forecasting project: The System Operator is part of the Intermittent Generation evaluation panel. The panel have concluded their initial evaluation and preparing their recommendation for those to proceed to trial stage. The System Operator has been involved in the intermittent generation forecasting project from a procurement/evaluation point of view, and has worked closely with the Authority to identify the key requirements and risks associated to the project. The System Operator has also raised with the Authority the potential for TAS-related work following on from the Intermittent Generation project.

Proposed Levy-funded appropriations 2025/26 consultation: We await the publication of the submissions and insight into the Authorities approach to the appropriation.

System Operator Strategic Plan and Capex Plan 2025: The draft versions of the System Operator Strategic Plan, ICT Strategic Roadmap, CAPEX Roadmap and CAPEX Plan were delivered to the Authority on 17 January. The Strategic Plan will be discussed at the Authority's Market Operations Committee meeting on 24 February.

Media interactions

There was a small amount of media interest when we called a [grid emergency](#) on the morning of 2 January to remove some circuits in the South Island to mitigate the risk of damage from a solar storm. There was no risk of impact to electricity supply to consumers and coverage was balanced and non-alarmist.

Energy News sought comment on the connection of Lodestone Energy's Te Herenga o Te Rā solar farm to our Waioatahe substation, and we proactively contacted Energy News to correct an error in a story about the upcoming HVDC outage and its impact on the power system.

TVNZ, NZ Herald and Radio New Zealand enquired about the [Grid Emergency Report](#) issued on 30 January after we had verbally issued a grid emergency notice to de-energise Matahina substation to assist a generator resolve an issue. We explained the situation and the limited impact on some Horizon Energy customers and no stories were run.

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): Development is currently underway. User Acceptance Testing Tranche 1 is scheduled to begin in March. A Show and Tell session for Senior

Leaders and the broader Business team is being organized. The Data & Analytics team is engaged, with a Data Analyst set to join from February 19th. NZX has been contacted for engagement, and we are awaiting their response.

D&A Modernisation – Market System Data: Data ingestion and migration activities continue. Frequency keeping, HVDC, Outages, Event, SCADA data validation and load forecast have been completed during the last month with actual load and solve constraints planned for the coming month. Implementation and testing of the security model in production has been completed.

SCADA Habitat and EMP Refresh: Packages 1 and 2 have been delivered by the vendor but delayed to the original project timeline. Factory acceptance testing of these releases has commenced. The impact of vendor delivery delays has been assessed by the project and options are being considered to minimise or avoid delays to the go-live date.

Credible Event Review: We have completed the minor changes on the event classifications of interconnecting transformers on 29 January 2025.

7 Technical advisory hours and services

The following table provides the technical advisory hours for the month and a summary of technical advisory services to which those hours related (SOSPA 12.3 (d) refers).

TAS Statement of Work (SOW)	Status	Hours worked during Month
TAS 108 – AUFLS Transition	In progress	56
TAS 112 – Future Security and Resilience	In progress	239.5
TAS 113 - BESS Wholesale Market Enhancements	In progress	88
TAS 115 - Settlement of the market following publication of final prices for 9 Aug 2021	In progress	12
TAS 116 – Implementing a hybrid forecasting arrangement – procuring a centralised forecast provider	In progress	1

Progress:

TAS 108 Extended Reserve Implementation 23/24 – Extended Implementation: Transition continued in January with a total of 1,082 feeders (71%) transitioned to the 4-block AUFLS scheme, which is 18 feeders more than were forecasted in the original transition plan for this month. In January, the System Operator received change requests from four NI AUFLS providers for the February period and future months. The studies showed no security issues and the change requests for February 2025 were approved, and the System Operator did not identify any non-adherence during the January transition period.

TAS 112 FSR Workstream - Part 8 of the Code - Common Quality Requirements: In January, the System Operator FSR team provided technical support to the Authority team, reviewing several draft options decisions and Code amendment consultation papers. Progress was made on the GXP power factor studies and BESS AOPOs literature review, with both reports drafted and submitted for internal review. Initial outcomes were presented at a regular SO/EA FSR progress meeting. Additionally, the System Operator prepared an outline for a new Common Quality Incorporated Document by Reference, outlining the general scope for its sections. An additional workshop was held to evaluate the pros and cons of reactive power coordination options, aiding the development of the Authority's draft presentation for the CQTG meeting in February. This work is closely linked to the Authority's FSO programme. The System Operator Market Services team began engaging with the Authority to align the FSR and FSO programmes, ensuring the FSO programme is informed by the TSO perspectives and requirements identified under the FSR programme.

TAS 113 - BESS wholesale market enhancements: In January, the team continued with further reviews and updates to the TAS report, and made final preparations with IST for the ROM sessions, which took place late January.

TAS 115 - 9th August 2021 UTS decision: The Production environment setup was completed in early January. A discussion with NZX confirmed that settlement implementation should proceed according to pre-agreed delivery plans (go/no-go). Settlement activities were subsequently carried out, with NZX action for completing and executing the remaining settlement activities (and executive settlement) in February. Transpower will need to complete LCE calculations towards the end of February, following the settlement. The final settlement activity for Transpower will be issuing LCE credit, along with transmission charges, in March.

8 Risk & Assurance

Risk Management

System Stability: System Stability is one of the emerging risks that threaten the provision of the System Operator Service. Impacts have been observed in other countries and it is a potential risk in New Zealand. We have been preparing for a Risk 'Deep Dive' on this issue which will be presented at the Authority MOC on 24 February.

Business assurance audits

Audit 50: Generation Commissioning Process Requirements (Power Systems): The Terms of Reference have been agreed for this audit, following the introductory discussions with the auditor team. Interviews have been arranged with the stakeholders to commence in February. This is a complex audit with many facets. Current expectation is that it will be concluded this quarter.

Remaining 2024/25 audits:

- Audit 51: Manage a national SCADA_EMS (Grid & System Operations)
- Audit 52: Electricity Risk Curves (ERC) modelling (Market Services)

Introductory discussions with the auditor team are being scheduled and Terms of Reference finalised.

9 Compliance

Other Participant Self Breaches: Nothing to report.



EA Compliance Team Information Requests: On 27 January 2025 we replied to further information requests on Event 4479 (your ref 2410NZSO1) and Event 4430 (your ref 2409NZSO1).

System Operator compliance activity for this period is set out in the table below:

Event number	Event date	Event Description	Update	Date sent to EA
4518	18/11/24	On 18 November 2024, the automatic 04:00 long non-response (NRSL) schedule failed to publish. The next NRSL at 06:00 completed successfully (including being published).	The System Operator self-reported a breach of clause 13.62(3)(a) of the Code as a schedule started in a trading period was not completed by the end of the following trading period.	17/1/25 EA ref: BN4789

10 Impartiality of Transpower roles

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.

System Operator Open Conflict of Interest Issues		
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. The 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

Ara Ake Trial: The System Operator and Grid Owner are collaborating on the FlexPoint platform. As outlined in previous reports there are currently no actual or potential conflicts of interest identified. We will continue to monitor the trial from an impartiality perspective.

11 Performance metric and 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.

12 Cost of services reporting

The cost of services reporting for 2024/25 will be delivered to the Authority by the end of the financial year.

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 12.3 (b).

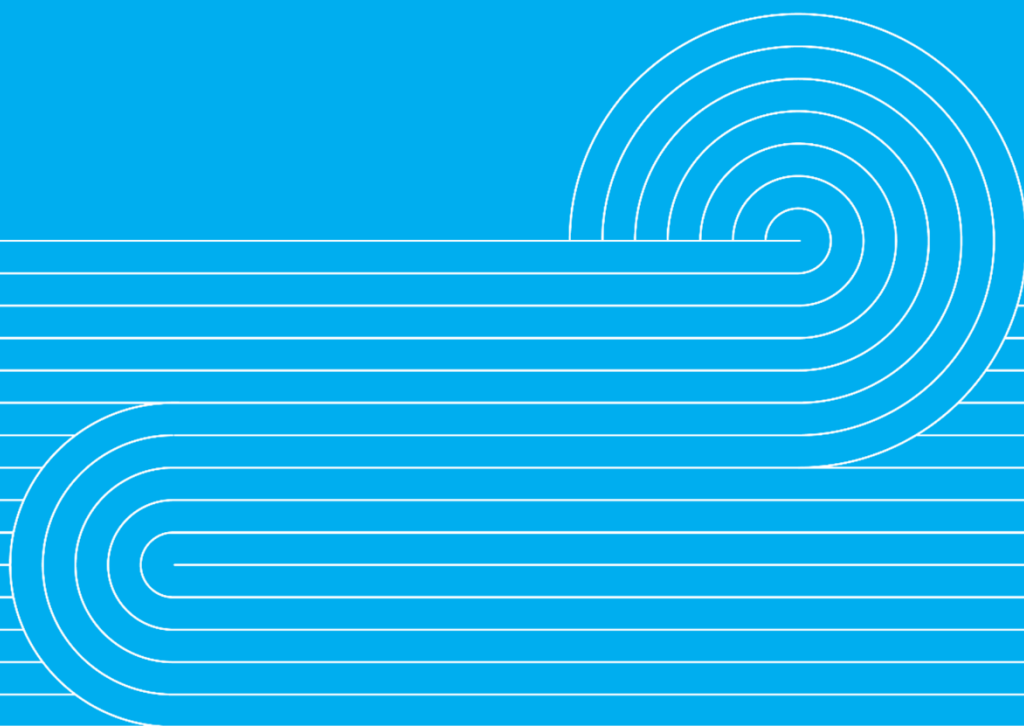
We note that re-prioritisation of our resources to support the System Operator and Authority Northland loss of supply investigations, the 2024 security of supply situation and the SOSPA3 process has constrained our capacity to progress our work on these activities to planned timelines.

Item of interest	Actions taken
<p>(i) To give effect to the System Operator business plan strategic initiatives:</p>	<p>Support future-focused market developments through white papers, consultation processes and cross-industry forums</p> <ul style="list-style-type: none"> Continued to participate in the Electricity Networks Aotearoa Future Network Forum's <i>Roles and Functions to enable distributed flexibility</i> project team weekly meetings. This project is actively engaging with the Authority. Our 2025 Security of Supply Assessment: Our survey of generators to understand the future generation pipeline closes on 11-Feb. <p>Develop a view of the information, market and standards required to operate the future electricity system to support the FSR work program</p> <ul style="list-style-type: none"> Work continues to support the Authority's FSR programme, and we have predominantly focussed on completing the study work and preparations for the EA CQTG meeting in February 2025. This involved drafting reports with the outcomes and recommendations from the BESS AOPOs literature review, and assessment of the GXP power factor study results. We continued providing support to the Authority drafting the options decision consultation papers covering options addressing frequency and voltage management issues, and options regarding information sharing requirements. We provided further support and reviews on Code Amendment decision papers clarifying Common Quality information requirements and terms in the Code. We have continued work with the Authority to clarify and scope requirements to progress work, which will move large parts of the Part 8 Technical Codes into a Common Quality Information Requirements Incorporated Document by reference. <p>Enhance quality assurance through delivery of the Modelling Quality Assurance Framework</p> <ul style="list-style-type: none"> Progress update provided to the compliance committee in December. Discussion and agreement with key stakeholders for implementing a pre-failover QA process have been completed, and review of Market's pre-failover and modelling peer-review processes is underway. <p>Implement stage 1 of new enterprise business process management (BPM) capability for system operations</p>

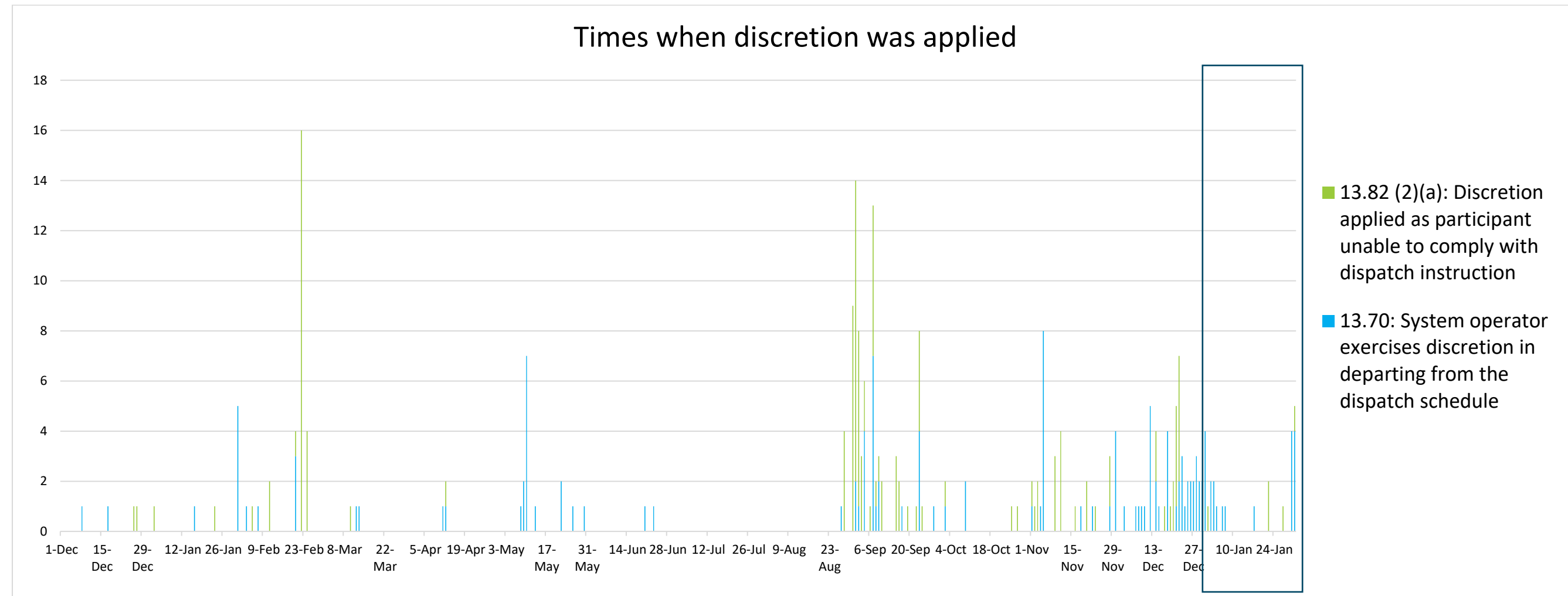
Item of interest	Actions taken
	<ul style="list-style-type: none"> The process architecture review and development are still in progress. This is being conducted concurrently with identifying and developing the value streams for the business architecture model to ensure alignment. <p>Leverage data and analytics developments to improve our data modelling and reporting</p> <ul style="list-style-type: none"> Data ingestion of market system data into the new data warehouse is ongoing. User Acceptance Testing continues with outages, events, load forecast and SCADA Data Validation (SDV) recently completed. <p>Deliver improvements to our generator commissioning management and assessment process</p> <ul style="list-style-type: none"> New and updated generation commissioning documentation and webpages on the Transpower website were published 31 January 2025.
(ii) To comply with the statutory objective work plan :	<p>Policy statement review (review due 1 November 2024)</p> <ul style="list-style-type: none"> We await the Authority's decision on our proposed amendments submitted for approval on 30 October. <p>AS procurement plan review (review due 8 June 2025)</p> <ul style="list-style-type: none"> Internal review process continues and is largely complete for 4 of the 5 ancillary services We have not received any Authority comment on the review scope shared in September and followed up in November. We intend to share the updated sections of the procurement plan once we have completed internal review, prior to submitting our pre-consultation documentation to the Authority. We are targeting consent to consult from the Authority in March. <p>Identify low residual / informational CANs (due 28 March 2025)</p> <ul style="list-style-type: none"> Completed September 2024, ongoing in each Quarterly System Performance Information report. <p>Low residual notices, threshold and process review (due April 2025)</p> <ul style="list-style-type: none"> Our Low Residual Situation review consultation paper received 6 submissions and 2 cross-submissions to which we are currently preparing our response.
(iii) In response to participant responses to any participant survey :	<p>We have initiated the process of developing our annual participant survey for the 2024-25 period. Our goal is to gather valuable feedback that will help us improve and better serve our participants.</p>

Item of interest	Actions taken
(iv) To comply with any remedial plan agreed by the parties under SOSPA 14.1	<i>N/A – No remedial plan in place.</i>

Appendix



Appendix A: Discretion



System Operator applied discretion under cl 13.70 in 21 instances:

- 1 instance applied on 1 January by traders in response to a 13.82(2)(a) rule claim at Tauhara (TAB) as they were scheduled below minimum run.
- 7 instances applied as optional manual risk for the North Island allowing the site to remain connected to provide system security (voltage support):
 - 2 January 2 instances at TAB
 - 3 January 2 instances at TAB
 - 4 January 1 instance at TAB
 - 6 January 1 instance at TAB
 - 7 January 1 instance at TAB
- 1 instance applied on 17 January at Manapouri (MAN) as there was an emergency offload of a Tiwai (TWI) pot line. MAN output remained at 70 MW until line was returned.
- 3 instances applied by traders in response to a 13.82(2)(a) as the site scheduled below its minimum run:
 - 22 January 2 instances applied at Ohaaki (OKI)
 - 27 January 1 instance applied at Huntly (HLY)
- 4 instances applied on 30 January at Matahina (MAT) as there was a unit in distress with the only way to remove it safely from service being to clear the whole Matahina bus.
- 2 instances applied on 31 January at Rotorua (ROT) they were discretioned to zero due to tripping of ROT-Tarukenga 1 (TRK) and ROT-TRK_2.
- 1 instance applied on 31 January by traders in response to a 13.82(2)(a) rule claim at MAT as the site was unable to comply with dispatch due to plant safety.
- 2 Instances applied on 31 January as there was a constraints binding due to Ohakuri (OHK) 92 lockout:
 - 1 instance at TAB
 - 1 instance at MAT