



TRANSPower

Quarterly system performance information

July to September 2026



Report Purpose

This report is Transpower's review of its performance as system operator in accordance with clauses 3.13 of the Electricity Industry Participation Code 2010 (the Code) and 12.3 of the System Operator Service Provider Agreement (SOSPA):

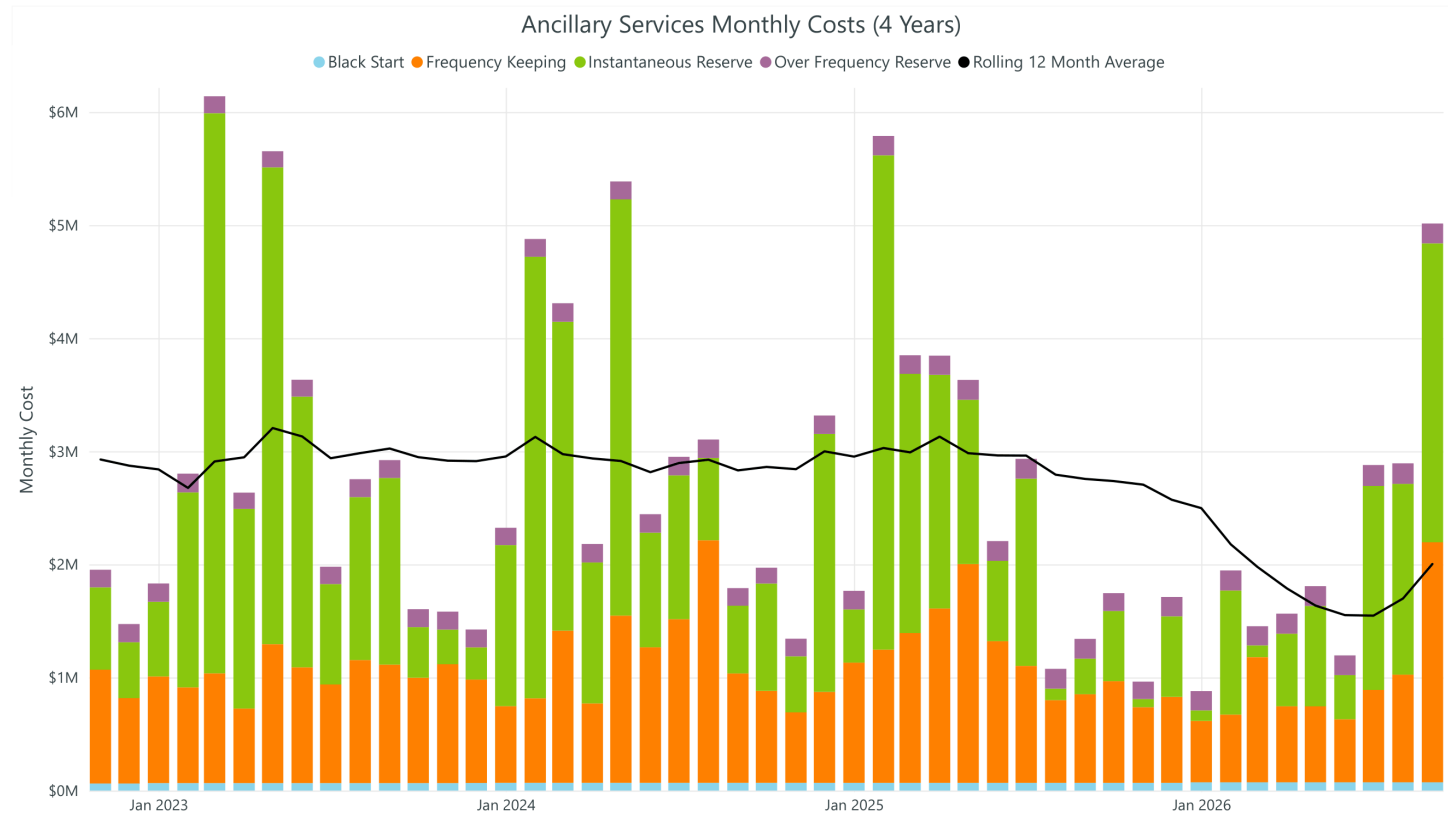
3.13 Self-review must be carried out by market operation service providers

- (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**.

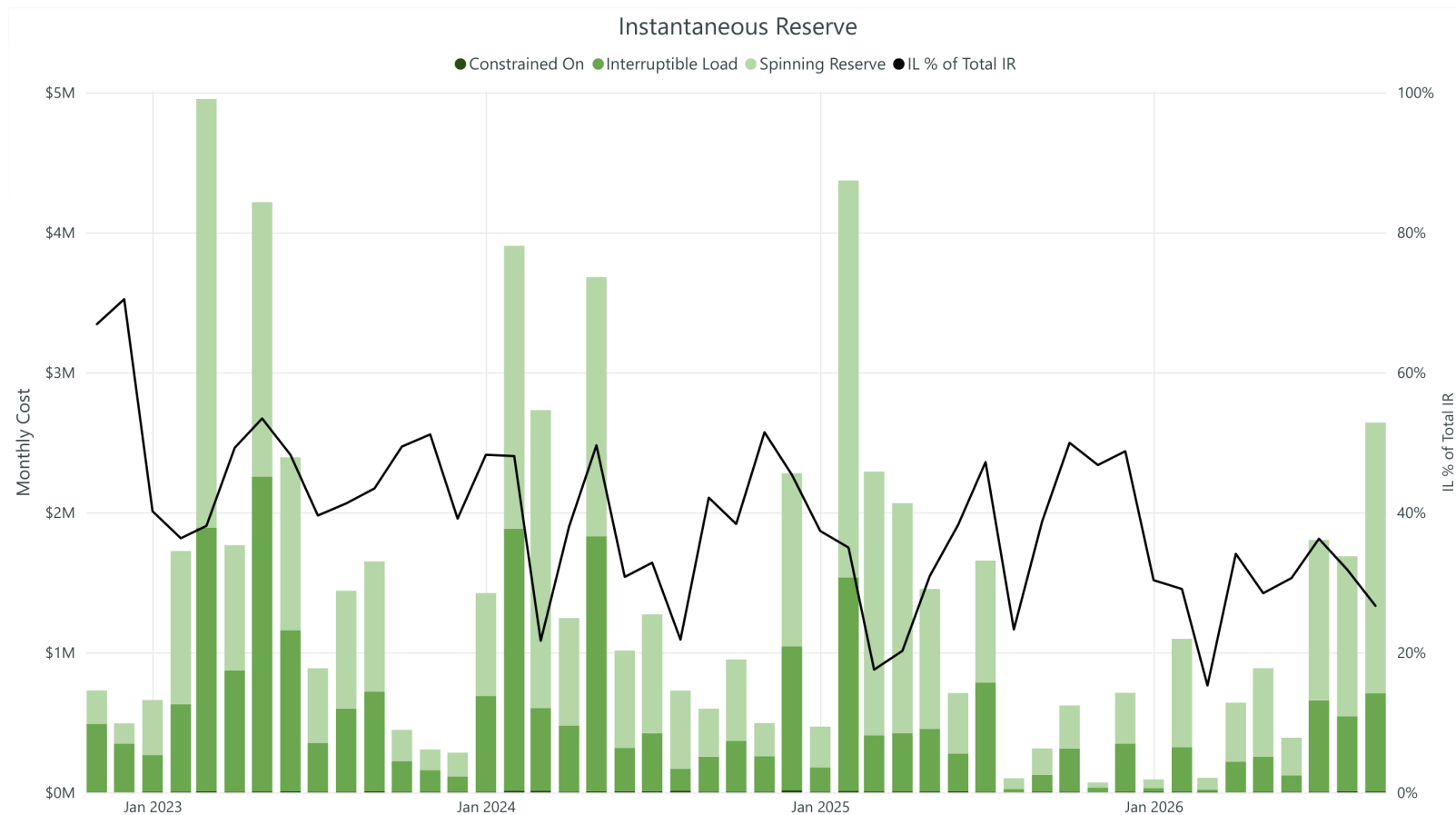
Contents

1	Ancillary services costs	1
2	Constrained on/off costs	5
	Frequency Keeping.....	5
	Instantaneous Reserves	7
3	Frequency fluctuations.....	8
3.1	Maintain frequency in normal band (Frequency value).....	8
	North Island.....	8
	South Island.....	8
3.2	Recover quickly from a fluctuation (Time)	9
	North Island.....	9
	South Island.....	10
3.3	Manage frequency and limit rate of occurrences during momentary fluctuations (Number).....	11
	Over-frequency events	11
	Under-frequency events	11
	Reporting against Code clause 7.2E:.....	12
4	Commissioning.....	13
4.1	FY 25/26 Completed and Confirmed Commissioning	13
4.2	FY 26/26 New Capacity (MW) by Generation Type	14
5	Security notices.....	15
5.1	Low residual CANs	15
5.2	Grid emergencies.....	16

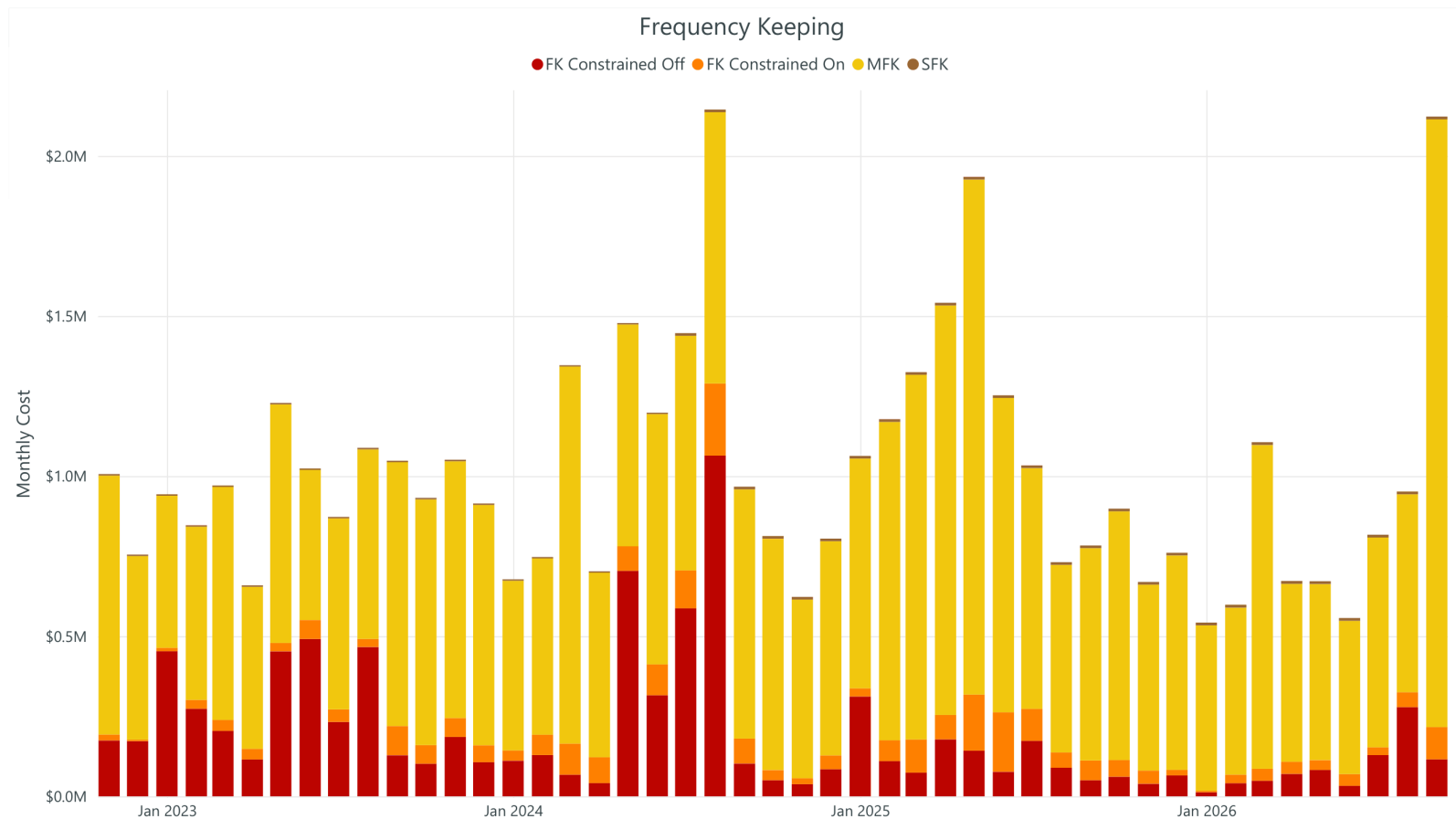
1 Ancillary services costs



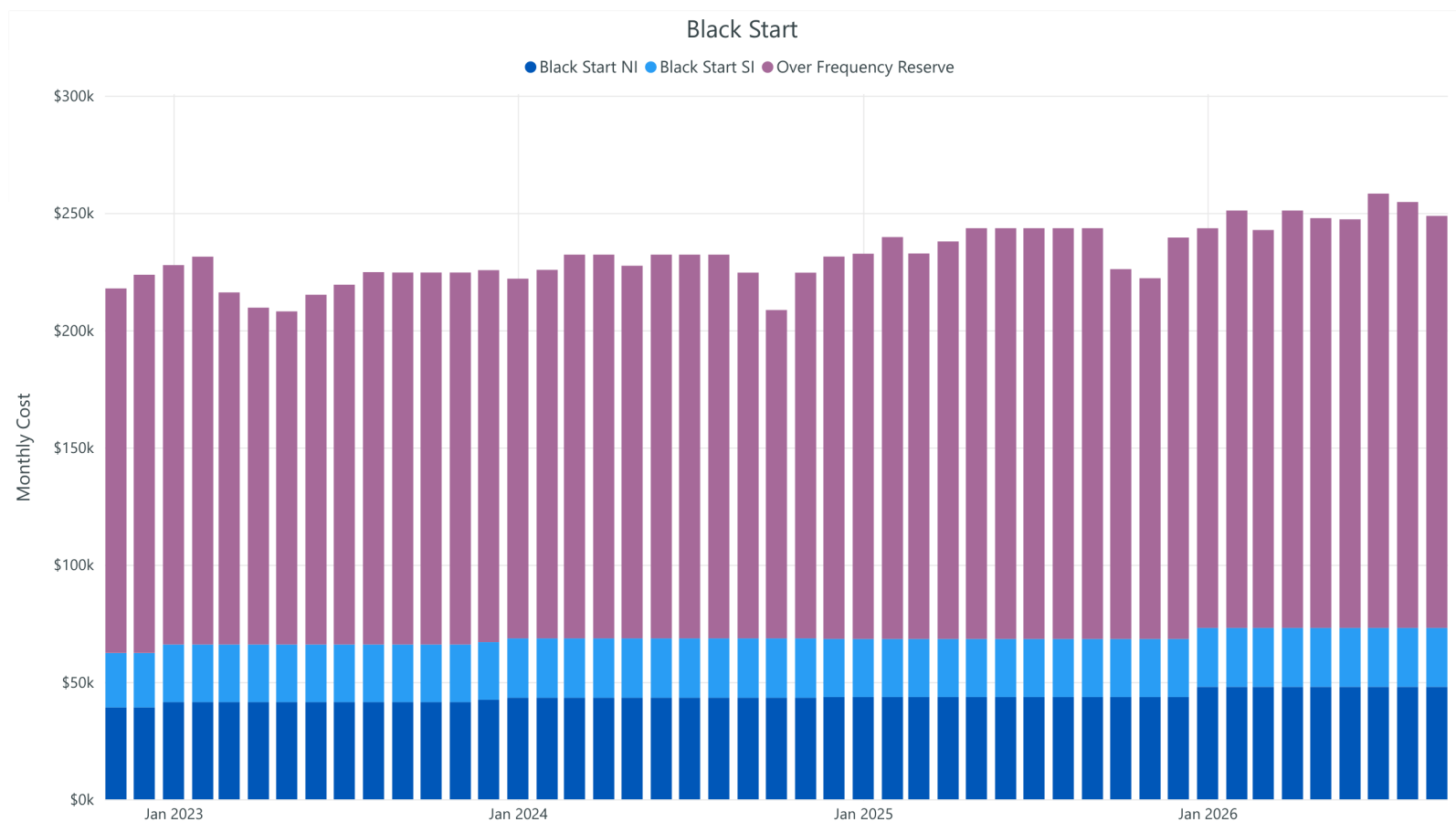
Ancillary service costs increased this quarter compared with the previous quarter. The increase was driven by rising frequency keeping and instantaneous reserve costs over the quarter which are shown in more detail in the following plots.



Total instantaneous reserve costs increased during the September quarter. Higher reserve volumes and elevated reserve prices during August and September contributed to the increase in costs, alongside sustained periods of high northward HVDC transfer during the quarter.



Frequency keeping costs increased during the September 2026 quarter, with September recording the highest monthly Multi frequency keeping (MFK) costs in the four-year period shown. September MFK costs reached approximately \$1.9 million, around twice the historical monthly average. This coincided with the MFK trial, during which the MFK band was increased to 50 MW between 5am and 9pm daily. Higher frequency keeping offer prices during the trial period contributed to the increase in costs.

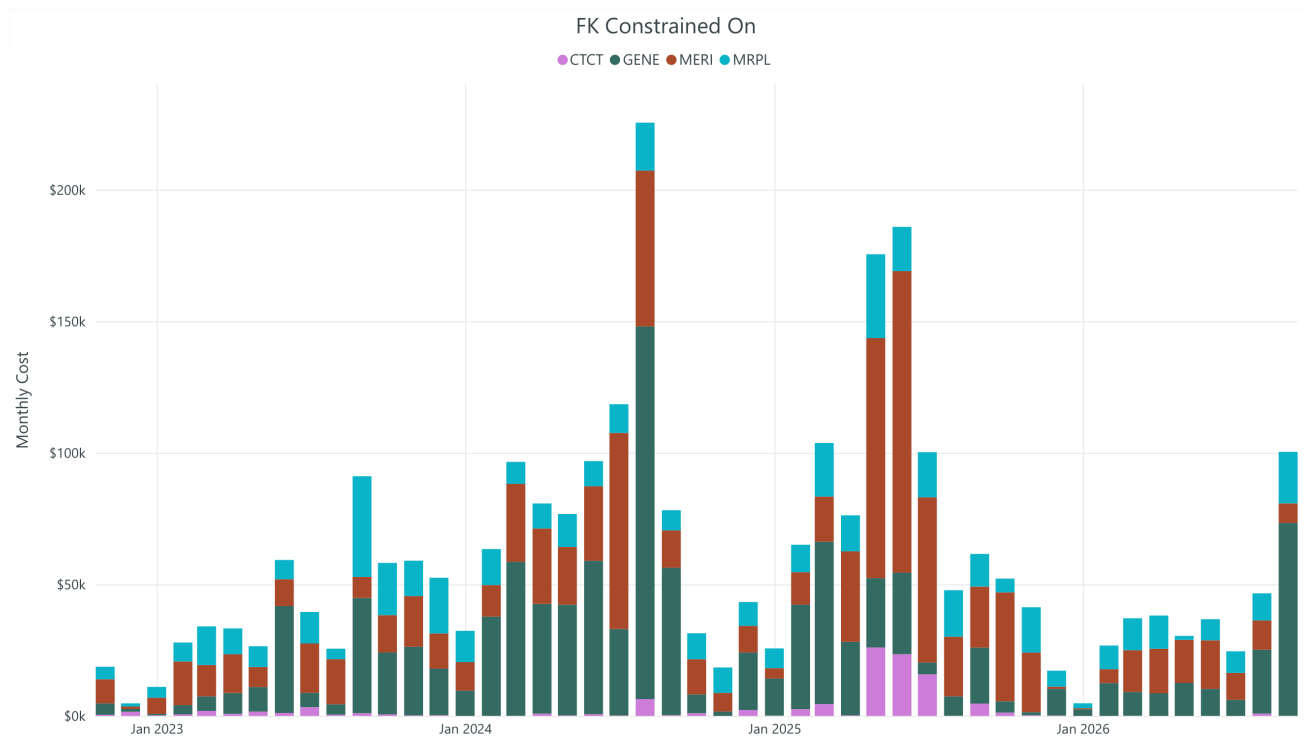


Black start and Over-frequency reserve (OFR) costs remained relatively stable during the September quarter, with only a modest increase in OFR costs compared to last quarter reflecting greater unit availability over the period.

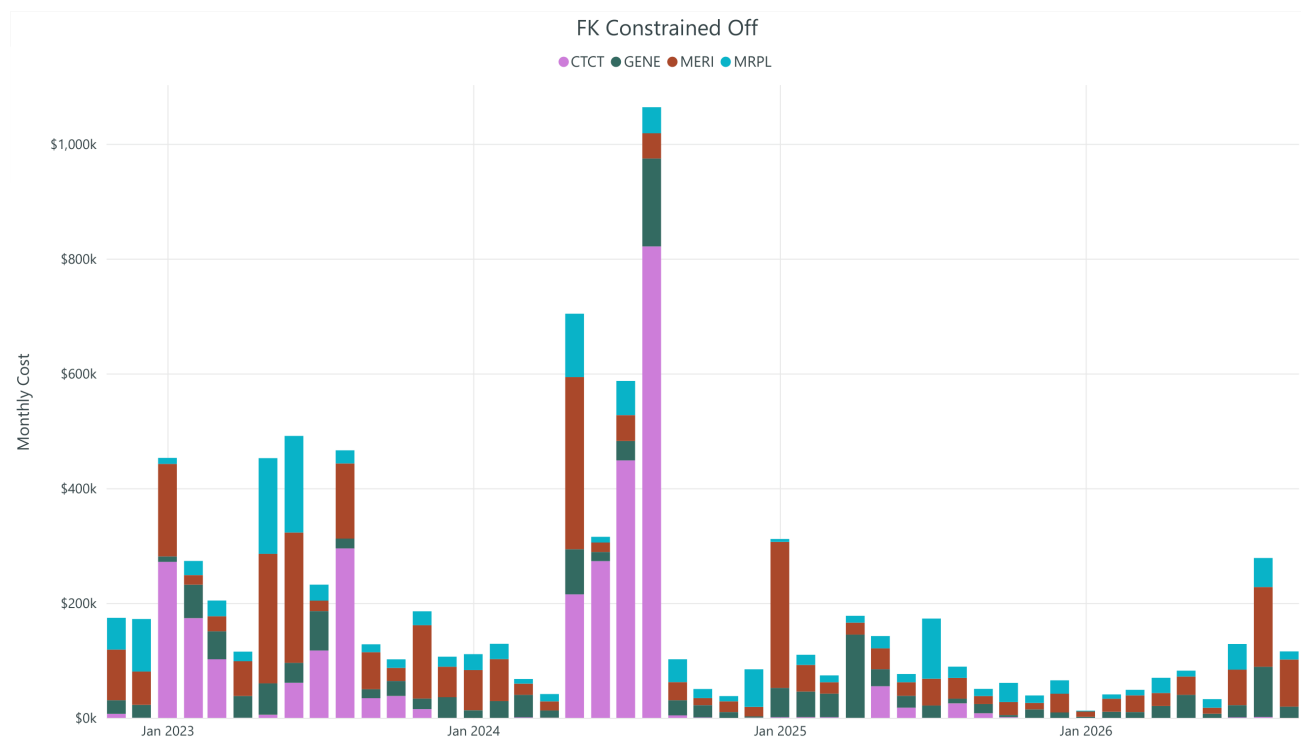
2 Constrained on/off costs

Note: Where there is a high payment, as opposed to an increasing/decreasing trend, it will often relate to payments over a small number of trading periods.

Frequency Keeping

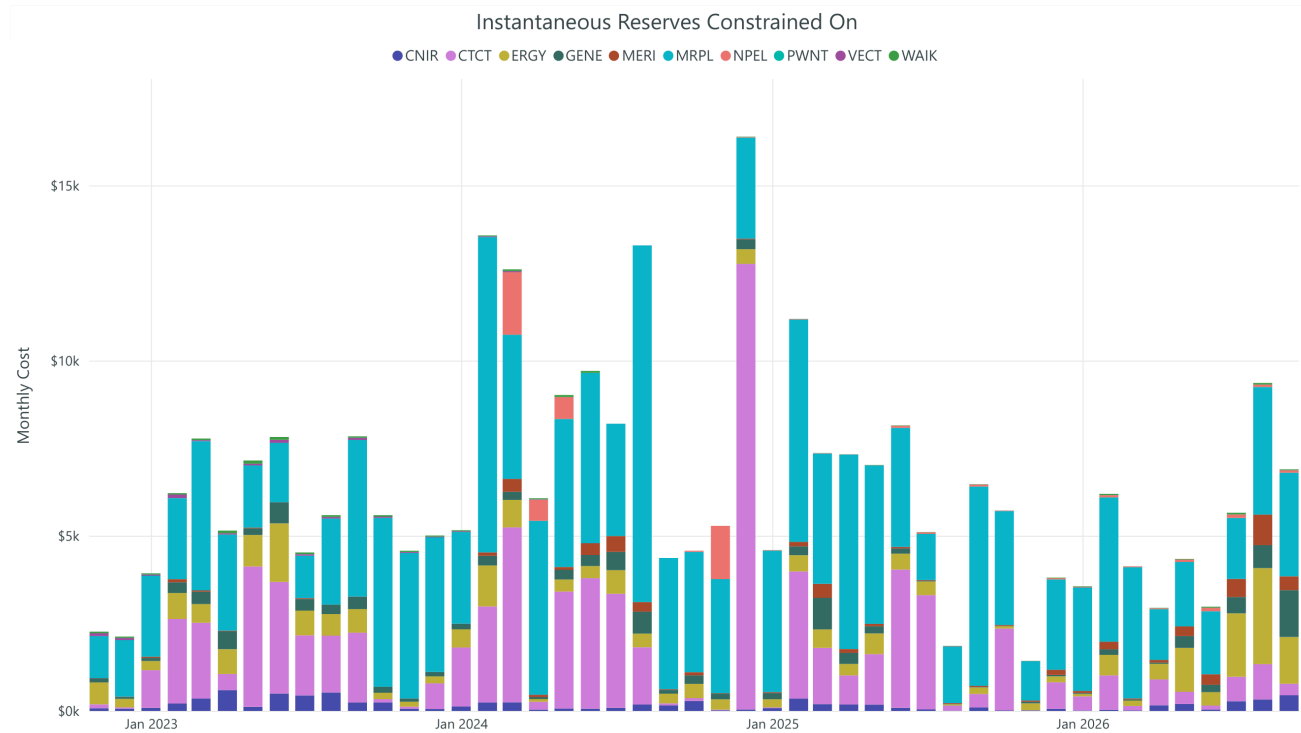


Constrained-on costs increased during the September quarter compared with the June quarter, with the highest monthly costs in September. Some of the increase in costs can be attributed to high market prices and higher frequency keeping procurement requirements associated with the September MFK trial.



Constrained-off costs increased during the September quarter compared with the June quarter, with high monthly costs in August.

Instantaneous Reserves



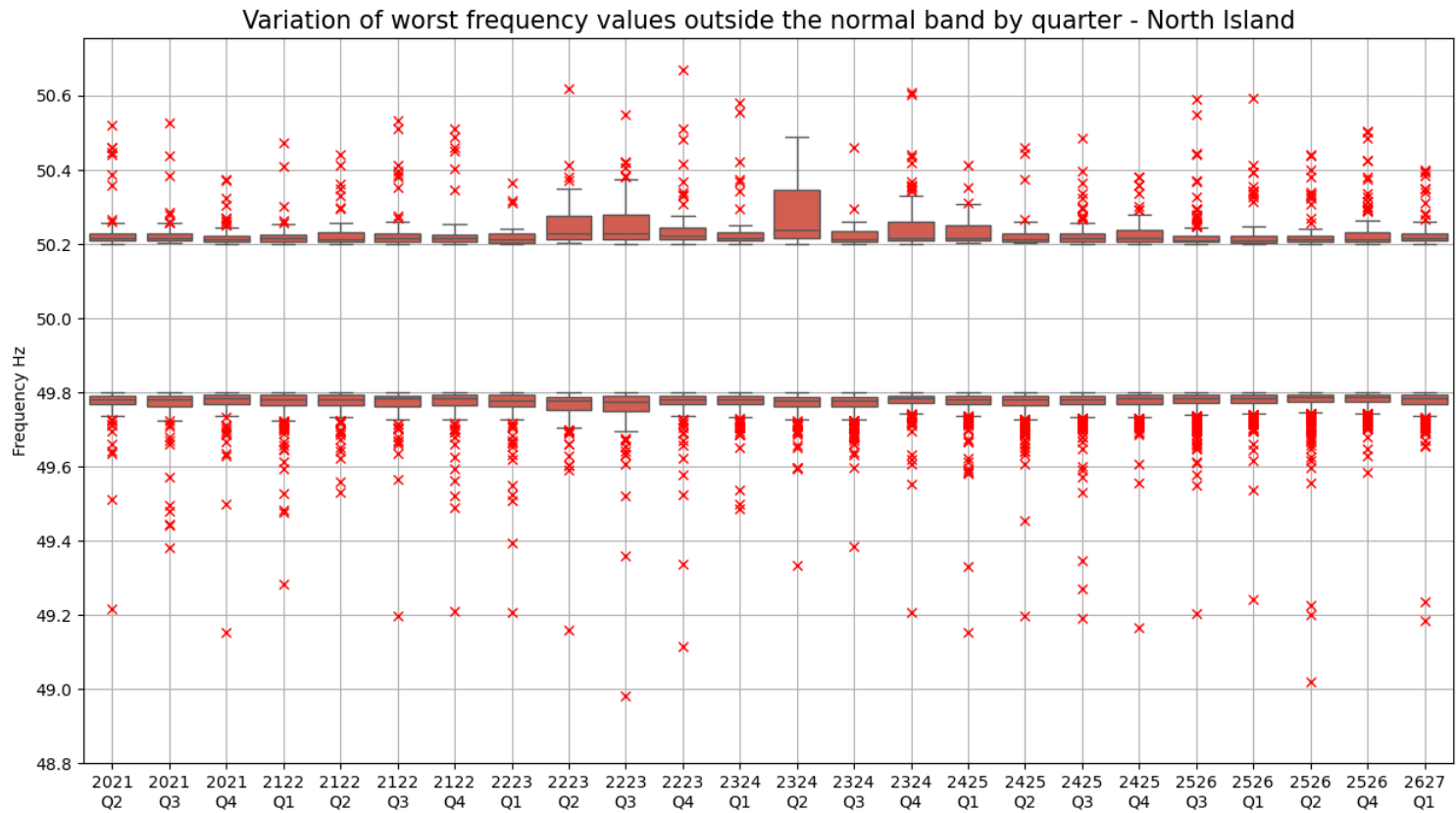
Costs increased in the September quarter compared with the June quarter. Costs were influenced by periods of elevated energy and reserve prices during August.

3 Frequency fluctuations

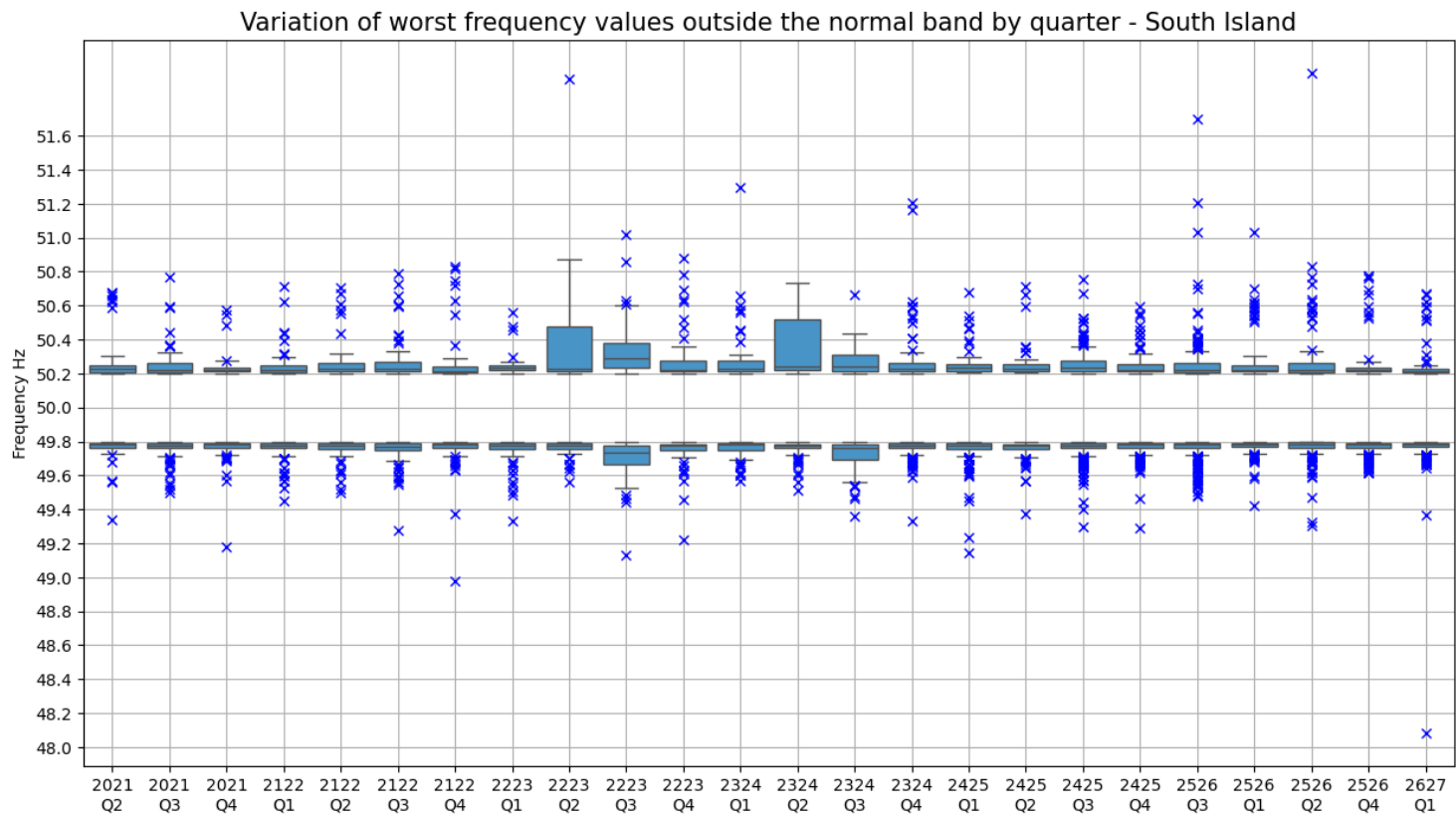
3.1 Maintain frequency in normal band (Frequency value)

The following charts show the distribution of the frequency excursions outside the normal band (49.8 to 50.2 Hz) by quarter, including the reporting period.

North Island



South Island



Note: These box and whisker charts show the distribution of data. The “box” represents the distribution of the middle 50% of the data, the “whiskers” indicate variability, and outliers are shown as single data points.

Excursions ± 0.5 Hz of the normal band this quarter:

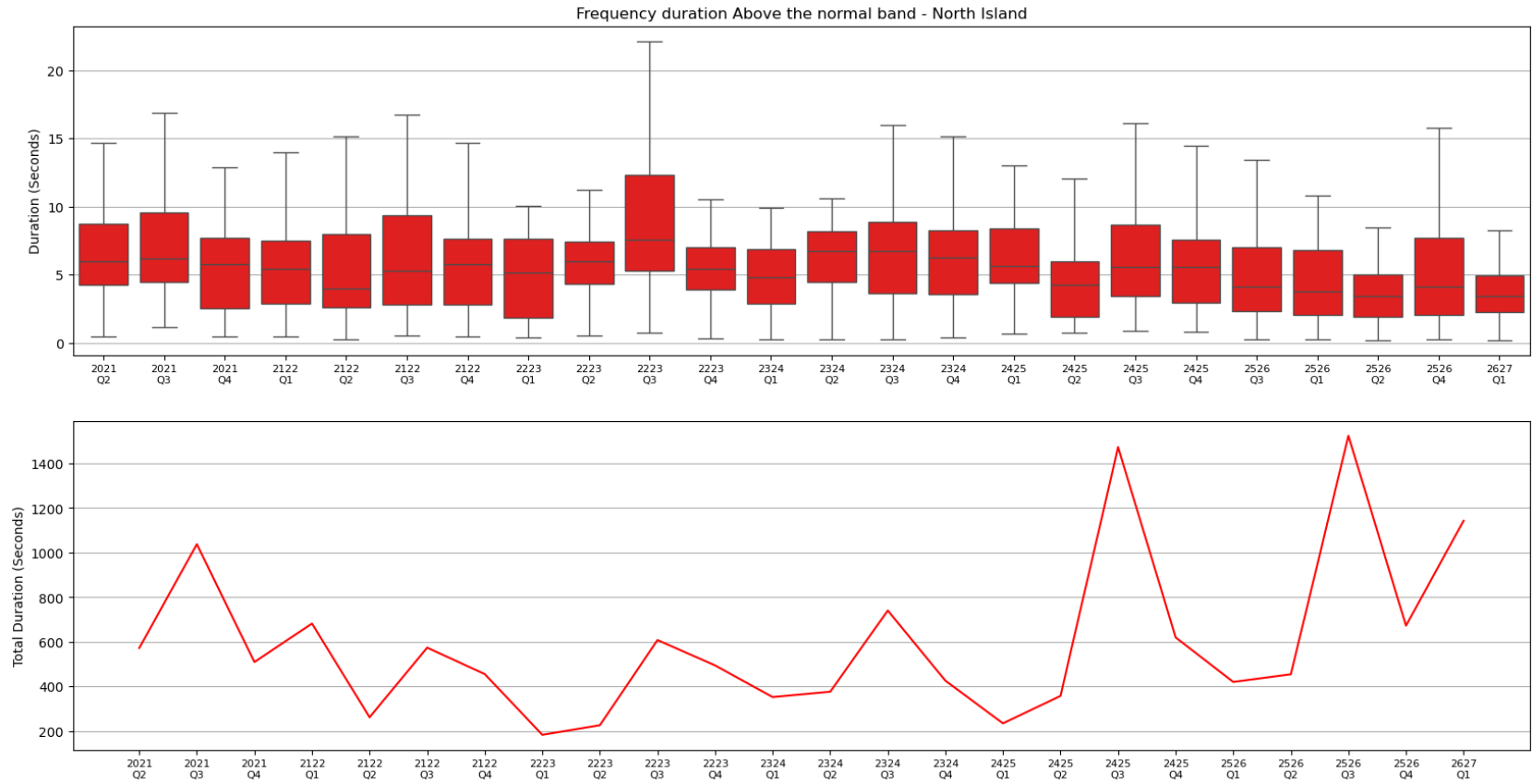
	Above	Below
July	Tiwai Potline offload 02/07	-
August	Tiwai Potline offload 07/08, 11/08	Huntly U4 trip 2x instances on 04/08. Tiwai and Manapouri trip, 2x instances on 23/08
September	Tiwai Potline offload, 2x instances on 12/09, 1x instance on 16/09 and 17/09. Tiwai Potline trip 19/09.	-

3.2 Recover quickly from a fluctuation (Time)

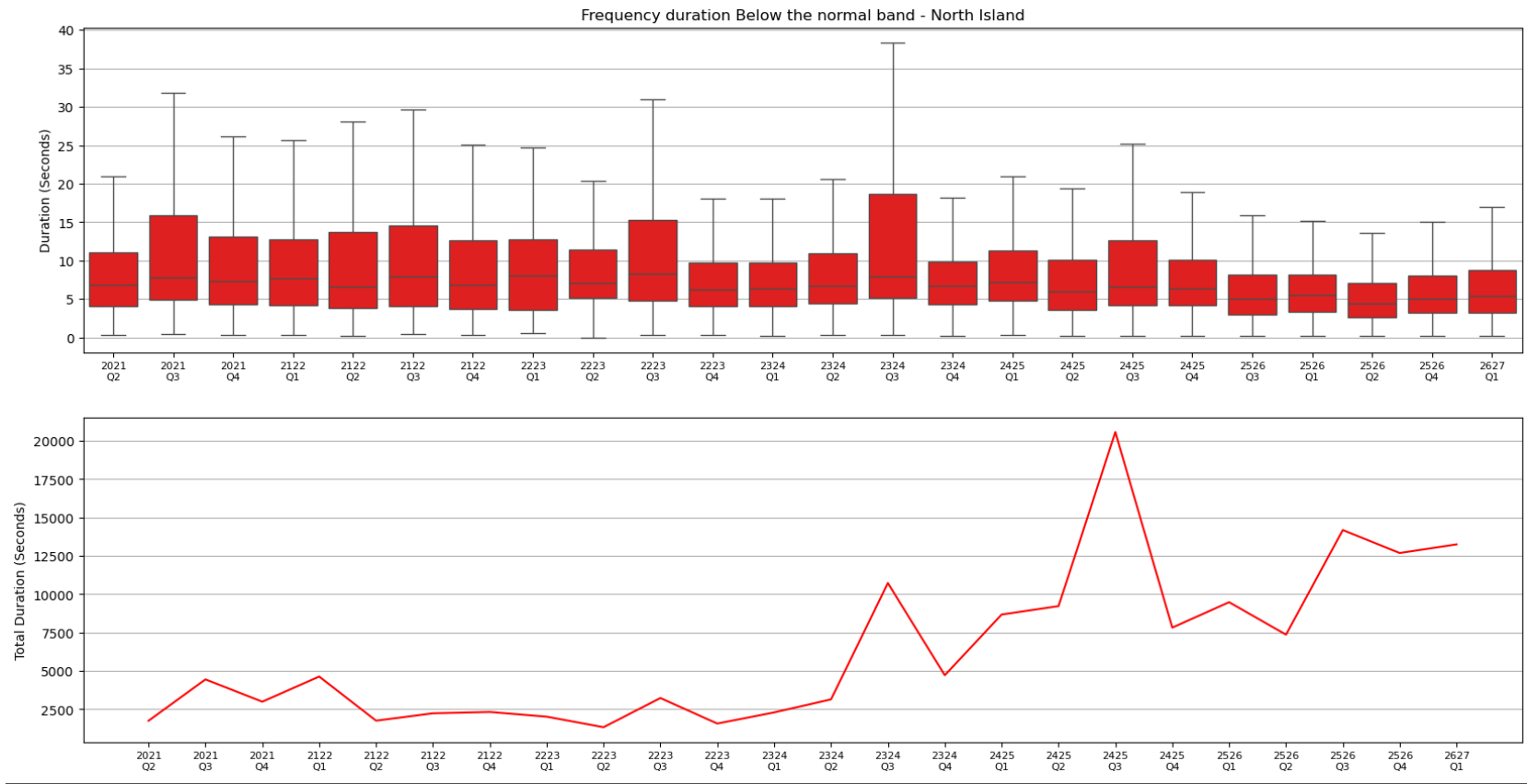
The following charts show the median and total duration of all the momentary fluctuations above and below the normal band for each island. The information is shown as a 4-quarter rolling average to illustrate trends in the data.

North Island

Above the normal band



Below the normal band

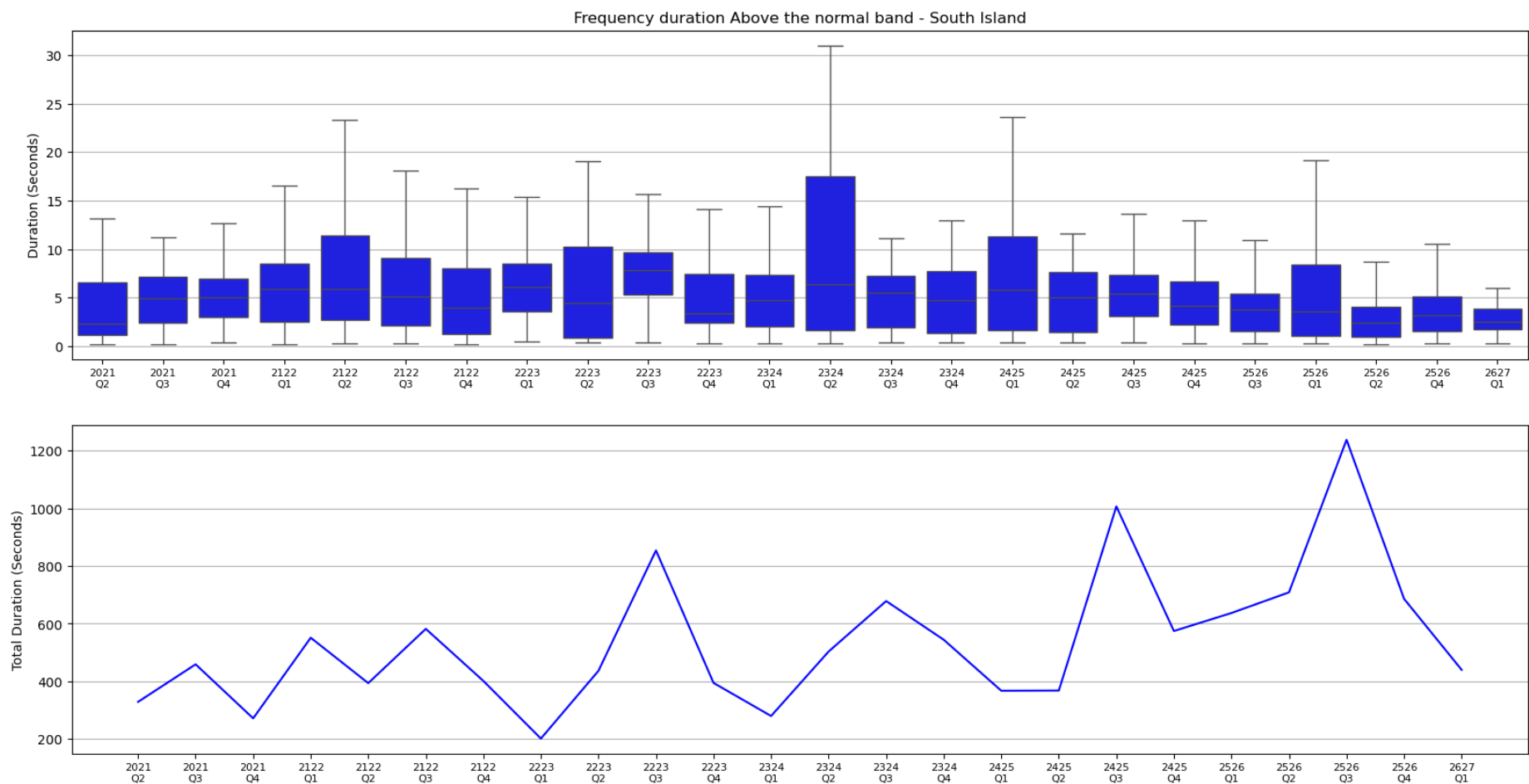


Excursions ± 0.5 Hz of the normal band this quarter:

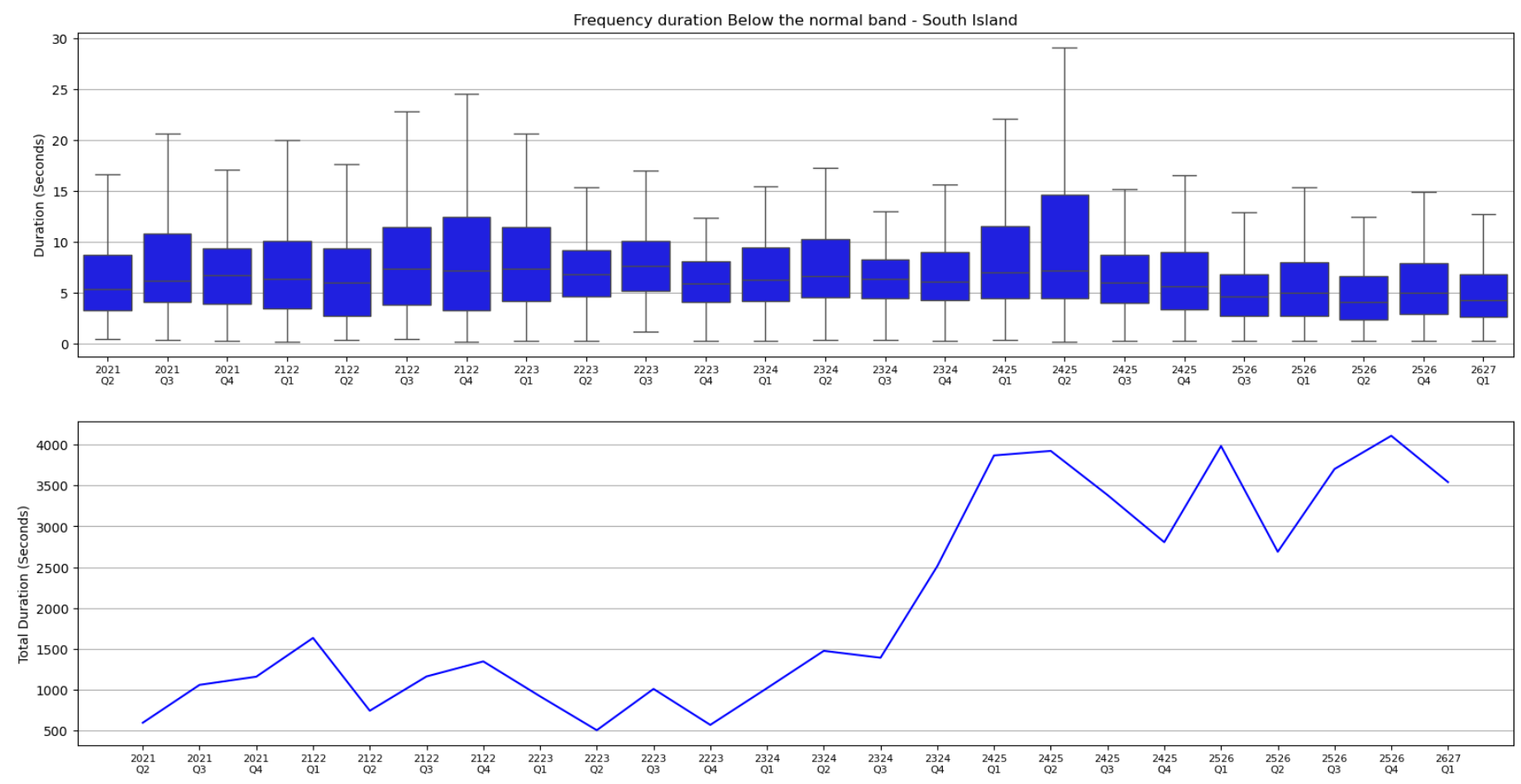
	Above	Below
July	-	-
August	-	Huntly U4 trip 2x instances on 04/08.
September	-	-

South Island

Above the normal band



Below the normal band



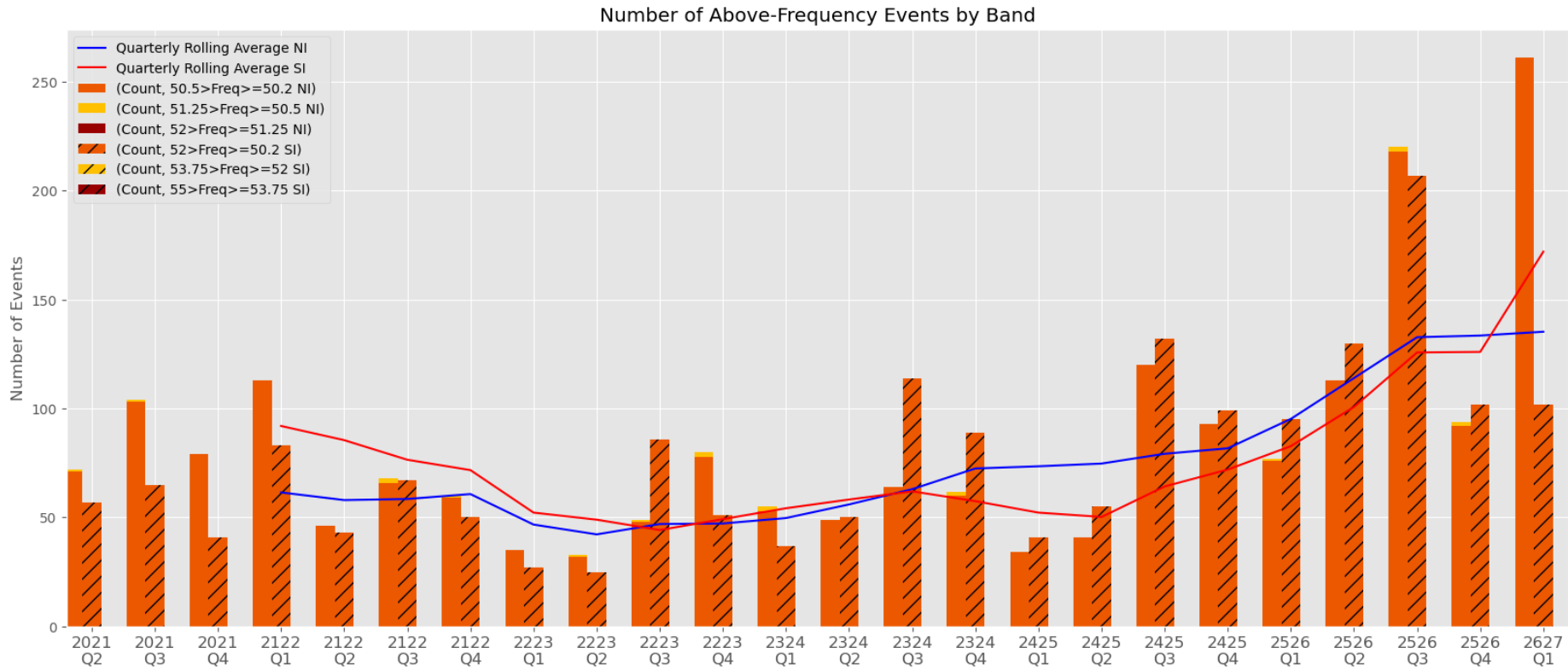
Excursions ± 0.5 Hz of the normal band this quarter:

	Above	Below
July	Tiwai Potline offload 02/07	-
August	Tiwai Potline offload 07/08, 11/08	Tiwai and Manapouri trip, 2x instances on 23/08
September	Tiwai Potline offload, 2x instances on 12/09, 1x instance on 16/09 and 17/09. Tiwai Potline trip 19/09.	-

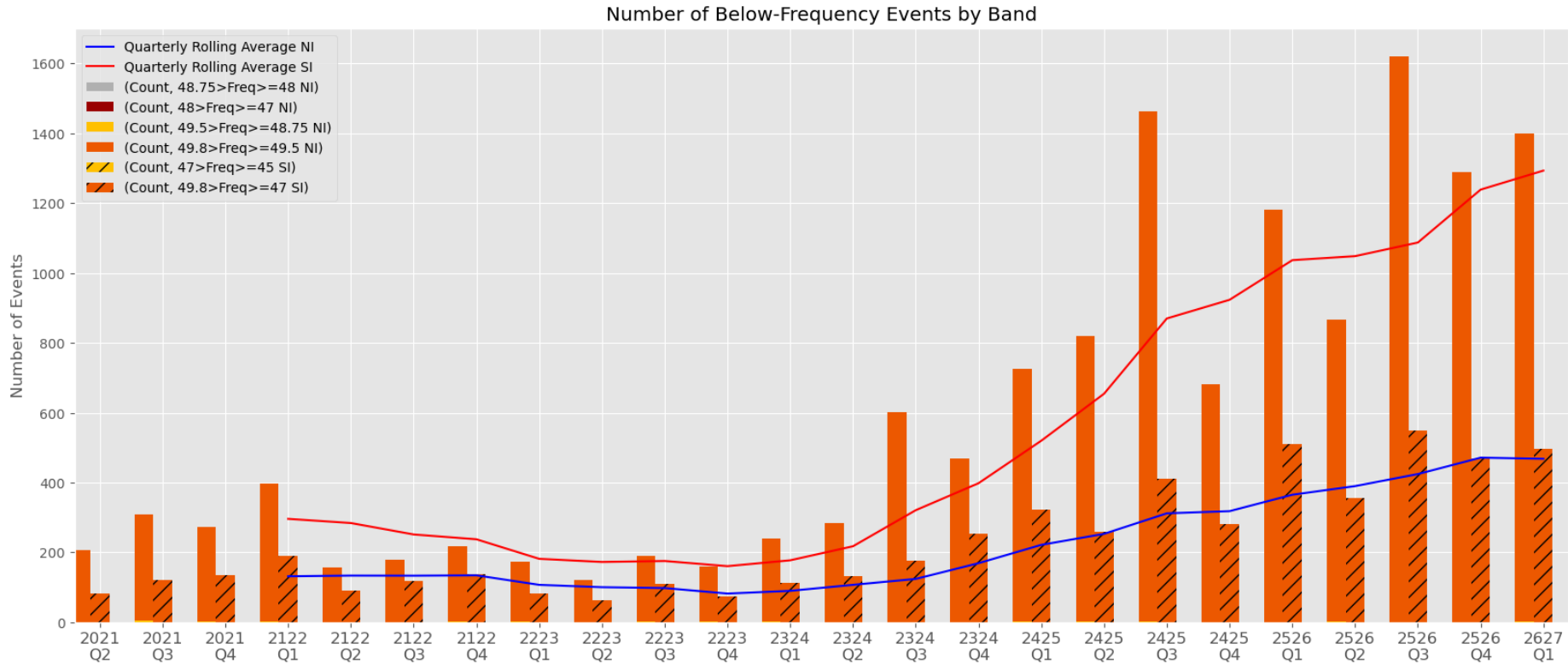
3.3 Manage frequency and limit rate of occurrences during momentary fluctuations (Number)

The following charts show the number of momentary fluctuations outside the frequency normal band, grouped by frequency band, for each quarter. Information is shown by island, including a 4-quarter rolling average to show the prevailing trend.

Over-frequency events



Under-frequency events



Excursions ± 0.5 Hz of the normal band this quarter:

	Above	Below
July	Tiwai Potline offload 02/07	-
August	Tiwai Potline offload 07/08, 11/08	Huntly U4 trip 2x instances on 04/08. Tiwai and Manapouri trip, 2x instances on 23/08
September	Tiwai Potline offload, 2x instances on 12/09, 1x instance on 16/09 and 17/09. Tiwai Potline trip 19/09.	-

Reporting against Code clause 7.2E:

North	52 > x	51.25 > x	49.5 > x	48.75 > x	48 > x
Island	≥ 51.25	≥ 50.5	≥ 48.75	≥ 48	≥ 47

2024					
Oct	0	0	0	0	0
Nov	0	0	0	0	0
Dec	0	0	2	0	0

2025					
Jan	0	0	2	0	0
Feb	0	0	0	0	0
Mar	0	0	1	0	0
Apr	0	0	1	0	0
May	0	0	0	0	0
Jun	0	0	0	0	0
Jul	0	0	1	0	0
Aug	0	0	0	0	0
Sep	0	1	0	0	0
Oct	0	0	2	0	0
Nov	0	0	0	0	0
Dec	0	0	1	0	0

2026					
Jan	0	0	0	0	0
Feb	0	1	1	0	0
Mar	0	1	0	0	0
Apr	0	1	0	0	0
May	0	1	0	0	0
Jun	0	0	0	0	0
Jul	0	0	0	0	0
Aug	0	0	2	0	0
Sept	0	0	0	0	0

South	55 > x	53.75 > x	52 > x	51.25 > x	49.5 > x ≥	48.75 > x	48 > x	47 > x
Island	≥ 53.75	≥ 52	≥ 51.25	≥ 50.5	48.75	≥ 48	≥ 47	≥ 45

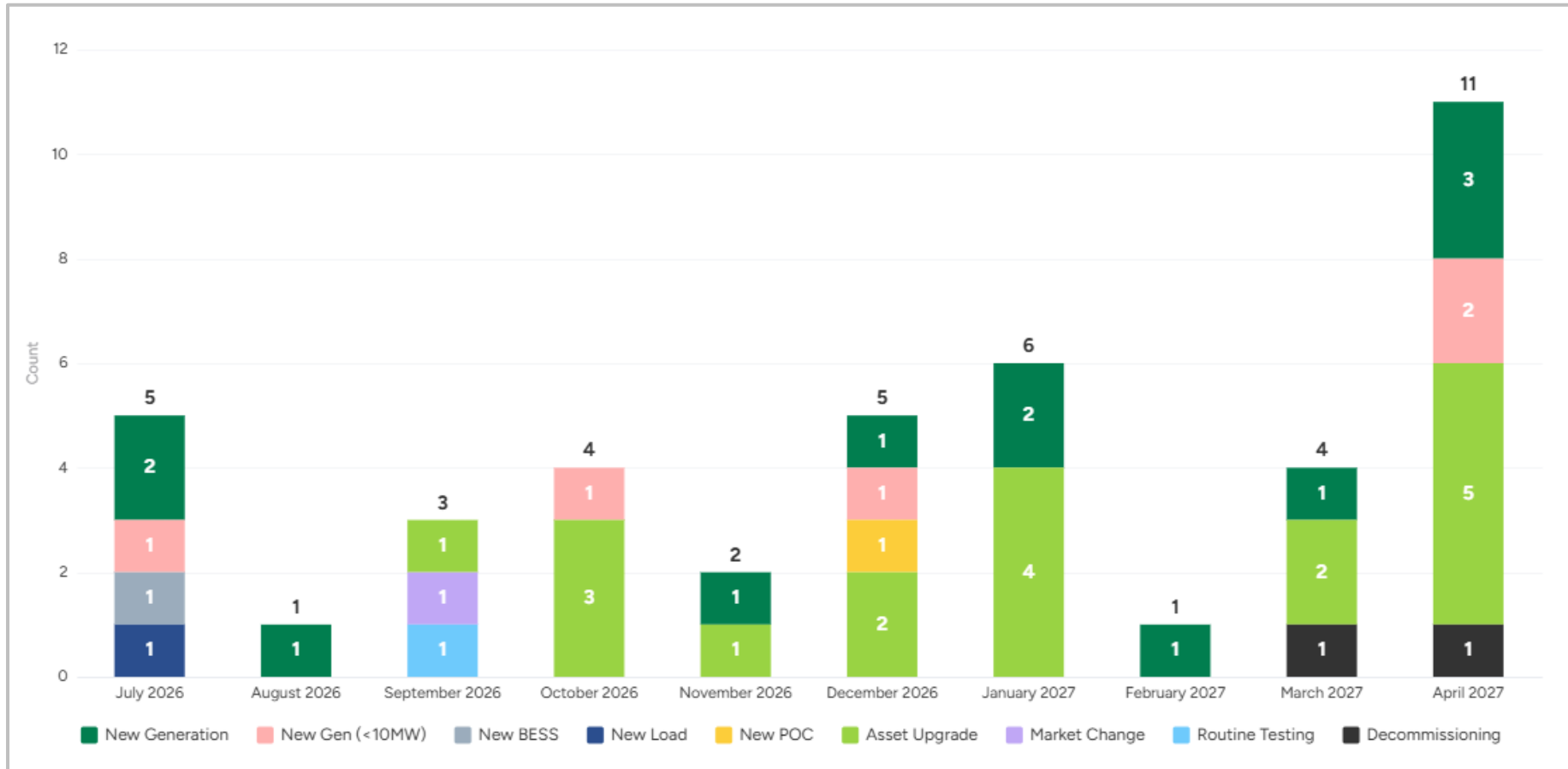
2024								
Oct	0	0	0	0	0	0	0	0
Nov	0	0	0	0	0	0	0	0
Dec	1	0	0	0	2	0	0	0

2025								
Jan	0	0	0	0	2	0	0	0
Feb	0	0	0	0	0	0	0	0
Mar	0	0	0	0	1	0	0	0
Apr	0	0	0	0	1	0	0	0
May	0	0	0	0	0	0	0	0
Jun	0	0	0	0	0	0	0	0
Jul	0	0	0	0	1	0	0	0
Aug	0	0	0	0	0	0	0	0
Sep	0	0	0	1	0	0	0	0
Oct	0	0	0	0	2	0	0	0
Nov	0	0	0	0	0	0	0	0
Dec	0	0	0	0	1	0	0	0

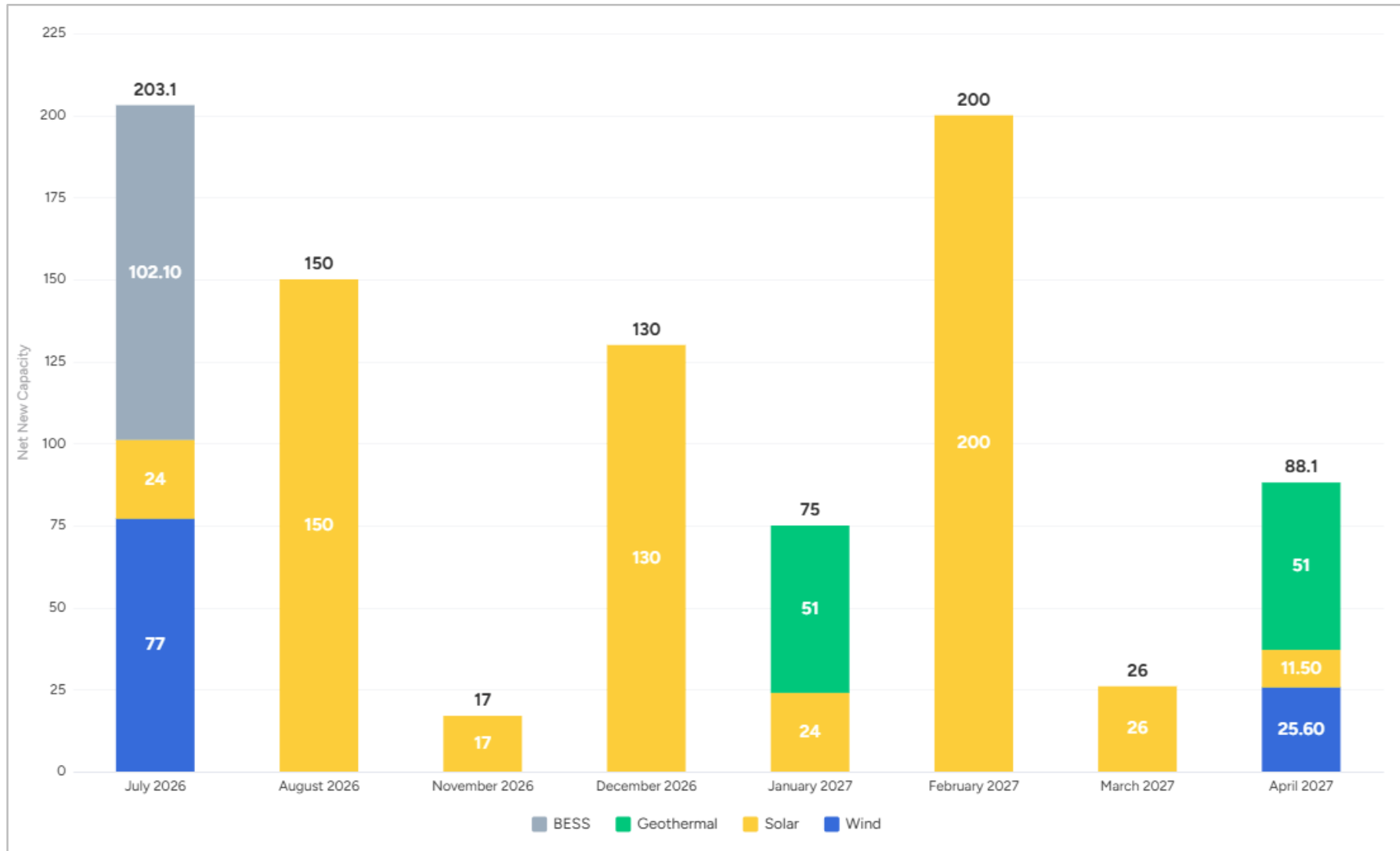
2026								
Jan	0	0	0	0	0	0	0	0
Feb	0	0	0	1	1	0	0	0
Mar	0	0	0	1	0	0	0	0
Apr	0	0	0	1	0	0	0	0
May	0	0	0	1	0	0	0	0
Jun	0	0	0	0	0	0	0	0
Jul	0	0	0	0	0	0	0	0
Aug	0	0	0	0	2	0	0	0
Sept	0	0	0	0	0	0	0	0

4 Commissioning

4.1 FY 25/26 Completed and Confirmed Commissioning



4.2 FY 26/26 New Capacity (MW) by Generation Type



5 Security notices

The following table shows the number of Warning Notices, Grid Emergency Notices and Customer Advice Notices issued over the last 12 months.

Notices issued	Oct-25	Nov-25	Dec-25	Jan-26	Feb-26	Mar-26	Apr-26	May-26	Jun-26	Jul-26	Aug-26	Sep-26
Grid Emergency Reports	2	1	2	-	-	-	1	-	1	-	2	-
Grid Emergency Notice	3	4	1	-	-	-	-	-	-	-	-	-
Warning Notice	-	1	-	-	-	-	-	-	-	-	-	-
Customer Advice Notice	12	14	10	22	23	11	20	11	10	17	20	7

5.1 Low residual CANs

This quarter we have issued 7x low residual Customer Advice Notices:

- 21 July - the System Operator advised that National residual generation is close to 200 MW for the 22 July 2026 07:30 – 08:30.
- 26 July - the System Operator advised that National residual generation is less than 200 MW for the 27 July 2026 07:30 - 08:30 and 27 Jul 2026 18:00 - 19:00.
- 27 July - the System Operator advised that National residual generation is less than 200 MW for the 28 July 2026 07:30-08:30.
- 4 August - the System Operator advised that National residual generation is less than 200 MW for 06 August 2026 07:30 - 08:00.
- 7 August - the System Operator advised that National residual generation is less than 200 MW for 07 August 2026 07:30 - 08:30.
- 16 August - the System Operator advised that North Island residual generation is less than 200 MW for 17 August 2026 17:30 - 19:00.
- 19 August - the System Operator advised that North Island residual generation is less than 200 MW for 20 August 2026 07:00 - 08:30.

We also issued 4x potential low residual Customer Advice Notices:

- 27 July - the System Operator advised that National low residual generation had been identified in the week ahead schedule for 29 July 2026 07:30 - 08:30.
- 3 August – the System Operator advised that a National energy shortfall or low residual generation had been identified in the week ahead schedule for 05 August 2026 07:30 - 08:30, 05 August 2026 18:00 - 19:30 and 06 August 2026 07:30 - 08:30.
- 5 August – the System Operator advised that a National energy shortfall or low residual generation had been identified in the week ahead schedule for 07 August 2026 07:30 - 08:30.
- 18 August - the System Operator advised that a North Island low residual situation had been identified in the week ahead schedule for 20 August 2026 07:00 - 08:30.

5.2 Grid emergencies

The following table shows grid emergencies declared by the System Operator in July to September 2026.

Date	Time	Summary Details	Island
19 August 2026	06:55	A Grid Emergency declared to disconnect Tauhei generation due to large voltage swings being caused by fluctuations in generator positive and negative MVars. Instructed the opening of Waihou circuit breaker 172.	NI
23 August 2026	11:52	Widespread unplanned outages across the lower SI caused loss of supply to North Makarewa, Brydone, and Edendale. Grid Emergency declared to reconfigure the grid and restore loads.	SI