



|   |    |
|---|----|
| Contents  |    |
| <b>Summary of the Panel’s Decision</b> .....                            | 2  |
| <b>Notice of Commencement</b> .....                                     | 3  |
| <b>Agreed Facts</b> .....   | 3  |
| <b>Remedial Orders</b> .....  | 5  |
| Pecuniary Penalty Order .....   | 5  |
| Negotiated penalties.....   | 6  |
| Relevant considerations.....  | 7  |
| Seriousness of the breach.....  | 7  |
| Aggravating and mitigating factors.....                                 | 8  |
| Overall assessment and process for arriving at an agreed position ..... | 9  |
| Costs.....  | 10 |
| <b>Orders</b> .....   | 10 |
| <b>Recommendation to Amend the Regulations</b> .....                    | 10 |
| <b>Right to Appeal</b> .....  | 11 |

## Summary of the Panel’s Decision

- [1] On 29 May 2023, Transpower self-reported a likely breach of cl 30.1B of the Policy Statement as a result of identifying in April 2022 a failure in the use of its Voltage Stability Assessment Tool (**VSAT**) to correctly apply security constraints in the modelling of the transmission system between 28 January 2022 and 13 April 2022.
- [2] On 5 June 2024, the Electricity Authority issued a Notice of Formal Complaint (**Notice**) under r 30 of the Electricity Industry (Enforcement) Regulations 2010 (**Regulations**) seeking a determination of breach of cl 8.14 of the Electricity Industry Participation Code 2010 (**Code**), whereupon the parties came to an agreed resolution and filed a joint submission dated 22 November 2024 (**Joint Submission**).
- [3] The Panel approves that agreed resolution between the Authority and Transpower, whereby:
- a. Transpower admits a breach of cl 30.1B of the Policy Statement and cl 8.14 of the Code in accordance with the agreed facts set out below; and
  - b. A pecuniary penalty order of \$65,000 be imposed, plus costs of \$3,820.

## Notice of Commencement

[4] The Notice alleged Transpower’s failure, as system operator, to comply with cl 30.1B of the Policy Statement effective from 11 January 2019 (**Policy Statement**), which is incorporated into the Code, and which the Authority considers required Transpower to correctly apply security constraints. Due to human error, one of the inputs used when developing voltage stability constraints contained a naming error. As a result, a constraint that was developed and applied from 28 January 2022 bound more often than it should have, and in circumstances where it should not have, from 7 February 2022 onwards. This had a market impact because more expensive generation was dispatched as a result of the application of the constraint. The application of the constraint in circumstances where it should not have applied was not identified until 13 April 2022.

## Agreed Facts

[5] In summary:

- a. a temporary voltage stability constraint (the **Constraint**) was developed and applied on 28 January 2022 to manage a low hydro storage situation in the lower South Island:
  - i. The Constraint limited total southward flows onto the two Clyde to Twizel circuits (CYD-CML-TWZ) in Southland Grid Zone 14 (GZ14) by setting the power transfer limit to a lower value than normal, but higher than the forecast power flows;
  - ii. The Constraint could be adjusted in real-time, in accordance with the system operator’s Voltage Stability Assessment Tool (VSAT); and
  - iii. Where the Constraint bound, local power dispatch from generation at Manapouri and Clutha would be increased to reduce the imported power flows. This generation would be at a higher cost.
- b. Transpower applies a 5% security margin to the load in every VSAT scenario to account for the variability of load in real-time. The exception to this is the load associated with the Tiwai aluminium smelter, which remains constant.
- c. As part of the process, an input file used by VSAT was modified, causing the tool to scale Tiwai aluminium smelter loads by 5% with the other GZ14 loads.
- d. As a consequence:
  - i. VSAT assumed there was more total forecast load in GZ14, and more power load would be imported through the CYD-CML-TWZ circuits to supply this forecast load. The Constraint was accordingly lowered in real-time more than it ought to have been to address perceived voltage stability risks.

- ii. The Constraint bound in some trading periods between 7 February 2022 and 13 April 2022 when it should not have, resulting in more expensive GZ14 generation being dispatched for 102 trading periods.
  - iii. The parties do not agree on the market impact of the error. The Authority's calculation of the market impact of this error is that generators were overpaid by approximately \$750,000, and purchasers overpaid by approximately \$2.96 million. Transpower considers that this is likely overstated, given that approximately two-thirds to three-quarters of the total demand is attributable to Tiwai, which has implemented market contracts to purchase energy outside the spot market (of which the Parties do not have visibility). Nevertheless, the Parties agreed for the purposes of calculating the penalty that the market impact was material.
- e. On 13 April 2022, Transpower identified this error and developed a new VSAT model to remedy it. On 29 May 2023, Transpower self-reported it had breached cl 30.1B of the Policy Statement.

[6] Following the discovery of the error, Transpower took various steps to identify and address the cause of the incident and mitigate the risk of similar incidents occurring in future (as set out in the Joint Submission and in an affidavit filed on behalf of Transpower sworn by its Head of Power Systems, Kathleen Moore). In summary, these comprised the following steps:

- a. An immediate short-term fix was deployed once the issue was identified. Transpower acted with urgency to prevent any further impacts.
- b. Permanent targeted steps to avoid repetition. Within four months of the issue being identified, Transpower deployed a version update to permanently mitigate against future recurrence of this specific issue.
- c. Wider investigation of business processes. Transpower engaged an external auditor (Grant Thornton) to undertake a Business Process audit of the VSAT tool and its processes for maintaining VSAT. That audit was completed in June 2023.
- d. Implementing recommendations of a wider investigation. Transpower implemented the recommendations from the external audit with management oversight. These actions enhanced Transpower's:
  - i. procedural documents;
  - ii. communication and collaboration processes between key teams;
  - iii. checking, tracking, tools, peer review, and approval processes in relation to VSAT configuration changes.

- e. Ongoing and continuing business improvement initiatives. The system operator continues to take steps to improve its systems, implementing changes to:
  - i. change scheduling and planning to improve resourcing and peer review consistency; and
  - ii. VSAT technical audit scheduled next year to review the methodology and tool setup.

[7] The Parties noted that they have differing approaches to the interpretation of cl 30.1B. The Authority considers it contains a correctness standard, whereas Transpower considers the Code will not be breached absent negligence. Each party reserved their position as to the application of the clause. They did not seek a determination from the Panel, and one has not been made. The Panel does, however, encourage an early resolution of those differences, and further comment has been made in paragraph [26] of this decision.

## Remedial Orders

### Pecuniary Penalty Order

[8] A pecuniary penalty order can only be imposed if the Authority seeks one.<sup>1</sup> Section 56 of the Electricity Industry Act 2010 (**Act**) stipulates:

- (2) *In determining whether to make a pecuniary penalty order and, if so, the amount of the order, the Rulings Panel must consider the seriousness of the breach of the Code, having regard to the following:*
  - (a) *the severity of the breach:*
  - (b) *the impact of the breach on other industry participants:*
  - (c) *the extent to which the breach was inadvertent, negligent, deliberate, or otherwise:*
  - (d) *the circumstances in which the breach occurred:*
  - (e) *any previous breach of the Code by the industry participant:*
  - (f) *whether the industry participant disclosed the matter to the Authority:*
  - (g) *the length of time the breach remained unresolved:*
  - (h) *the participant's actions on learning of the breach:*
  - (i) *any benefit that the participant obtained, or expected to obtain, as a result of the breach:*
  - (j) *any other matters that the Rulings Panel thinks fit.*

---

<sup>1</sup> Section 56(1) of the Electricity Industry Act 2010.

- [9] The section makes it clear that there are factors that the Panel “must” consider. It is not, however, limited to those factors that are listed. The overall consideration is “seriousness”. The list that follows are the factors that determine the seriousness of the breach. The list includes what could be considered as aggravating and mitigating factors.
- [10] Finally, the Panel observes regarding penalties that the Regulations limit the System Operator’s liability to \$200,000 in respect of any one event or series of closely related events arising from the same cause or circumstance.<sup>2</sup> On the other hand, s 54(d) of the Act (which had the same maximum) was amended on 1 September 2022 so that on determining a complaint that an industry participant has breached the Code, the Panel may make a pecuniary penalty order of an amount not exceeding \$2 million and a further amount not exceeding \$10,000 for every day or part of a day during which a breach continues.
- [11] Because the breaches here predated the amendment of the Act, the apparent continuing inconsistency in penalties between the Act (as amended) and the Regulations need not be addressed. That will not always be the case. In C-2022-002<sup>3</sup> and its 2022 to 2023 Annual Report, the Panel recommended that Subpart 2 of the Electricity Industry (Enforcement) Regulations 2010, which provides for limitations of liability when the Panel makes a remedial order for a breach under section 54 of the Electricity Industry Act, be amended to reflect the increase in the maximum pecuniary penalty under section 54(1)(d) of the Act from \$200,000 to \$2 million. The Panel restates that recommendation. Future matters that come before the Panel will most likely relate to events that occurred after the amended provisions in s 54(d) of the Act came into effect, and the Panel will have to rule on the inconsistency. In the Panel’s opinion, a review of the regulations would be preferable.

#### Negotiated penalties

- [12] The Panel has previously determined (e.g., its decision of 2 May 2023, C-2022-002<sup>4</sup>) that it should adopt principles applied by the High Court where there is a procedure allowing for negotiated penalties. The parties in the Joint Memorandum draw the Panel’s attention to three relevant aspects of that, including that when presented with an agreed recommendation, the Panel’s role is not to embark on its own enquiry but to consider whether the proposed penalty is within the proper range. While not disagreeing with that as far as it goes in the context of sufficient revelation of circumstances and the process followed to reach recommendations, it is also noted that (in Commerce Act cases, for instance) the court cautions that consideration and approval of a negotiated penalty is not a rubber stamping exercise.

---

<sup>2</sup> Regulation 53 of the Electricity Industry (Enforcement) Regulations.

<sup>3</sup> *Electricity Authority v Transpower* [2023] Rulings Panel Decision – C-2022-002 at [34] to [39]

<sup>4</sup> *Electricity Authority v Transpower* [2023] Rulings Panel Decision – C-2022-002 at [20]

### Relevant considerations

- [13] The Panel has suggested the following framework for arriving at an appropriate pecuniary penalty:
- a. The seriousness of the breach is to be assessed in accordance with the matters identified in paragraph [8] above and by reference to four bands suitable for use within the penalty limit:
    - i. Low – up to \$50,000
    - ii. Medium - up to \$100,000
    - iii. High - up to \$150,000
    - iv. Very High – up to \$200,000
  - b. The next step is to consider all the aggravating and mitigating factors, making due additions and subtractions as appropriate for relevant conduct.
  - c. The final step is to take a step back and make an overall assessment of the penalty to ensure that an over-mechanical application of a formula has not resulted in distortion or injustice.

### Seriousness of the breach

- [14] The Panel is content with where the parties landed as to the overall seriousness of the breach being at the high end of the medium band for the following reasons:
- a. Transpower's conduct involved negligence, albeit at only a moderate level, resulting in the Constraint not being applied as it was intended to be.
  - b. In terms of market impact, the impact was material. The Authority's position is that the impact is calculated by reference to spot prices, and consequently, its calculation is that generators were overpaid by approximately \$750,000 and purchasers overpaid by approximately \$2.96 million. Transpower disagrees with the Authority's position that market impact is calculated by reference to spot prices and considers the Authority's view overstates the impact on amounts paid to generators, and paid by end users.. Electricity purchasers often have forward contracts in place, so they are not exposed to fluctuations in wholesale prices. Transpower considers that the effect of such contracts is exacerbated in the circumstances of this particular breach because approximately two-thirds to three-quarters of the total demand in GZ14 is attributable to the Tiwai Point aluminium smelter, which has implemented long-term market contracts to purchase energy outside the spot market. The Parties agree that it is not necessary to resolve these differences given that they agree on the overall seriousness of the breach and do not seek a determination from the Rulings Panel on this point.

- c. The breach of the Policy Statement occurred at the time the Constraint was incorrectly applied on 7 February 2022 and was not remedied until over two months later on 12 April 2022.

[15] The Panel’s 27 March 2020 decision provides a useful comparison:

- a. That decision related to the tripping of attached circuits in the Hamilton 110kV bus zone, resulting in the loss of supply in the Waikato area for approximately one hour with a market impact of approximately \$3 – 4 million.
- b. The Panel considered the breach involved a moderate level of negligence, which suggested a “medium” level of culpability. It found the breach was severe having regard to the impact on consumers. From this, a starting point of \$100,000 was considered appropriate.

[16] The Panel concurs with the Parties that all cases must be decided on their own facts. In the present case, and unlike the 27 March 2020, the breach was not accompanied by an outage but was longer lasting, and, as noted above, the errors in the Constraint went unidentified for several months. In addition, the Authority’s view (with which Transpower disagrees) is that this breach had a broadly equivalent market impact. In view of this, the Parties agree that a starting point of \$100,000 reflects the overall seriousness and severity of the breach.

#### Aggravating and mitigating factors

[17] There are a number of mitigating factors:

- a. Since self-reporting its breach of the Policy Statement on 29 May 2023, Transpower has co-operated with the Authority’s investigation and has reached an early agreement with it on matters of liability and penalty.
- b. Transpower has subsequently taken remedial steps to address both the breaches and the contributing factors which led to the error in the Constraint.

[18] There have been four previous breaches of cl 30.1B of the Policy Statement by Transpower, although only one of these was closed with a warning and related to the incorrect application of a security constraint. (The other three were closed without a warning and were not similar to the current case). The Parties have different views as to the extent to which prior conduct ought to be taken into account but agree that it is not necessary to resolve these differences, given they agree on the overall adjustment for aggravating and mitigating factors.



- [19] In assessing an appropriate discount, some guidance can be taken from previous Panel decisions:
- a. In its 16 August 2022 decision relating to a failure of a protection relay at the Otira Circuit breaker, the Panel applied a 30% discount in view of Transpower's actions on learning of the breach, disclosure, and co-operation. However, the Rulings Panel noted that, unlike the present case, Transpower's post-event conduct was not as extensive or forthright as it could have been.
  - b. In its 25 March 2020 decision, the Panel made a net 25% reduction for Transpower's admission and co-operation.
- [20] Taking the above into account, the Parties agree that a net reduction of 35% to the starting point of \$100,000 is appropriate. In broad terms, this can be seen as being comprised of:
- a. A 25% discount for early admission of liability and co-operation in the Rulings Panel process.
  - b. A discount of 10% reflecting the remedial steps undertaken.
- [21] This is comparable to other discounts made by the Panel for post-event conduct and reflects the additional remedial work undertaken by Transpower to ensure that such breaches are not replicated.
- [22] The Panel would note that whilst Transpower self-reported the breach, the timeline indicates that action could have been taken sooner. More than a year passed before the self-reporting occurred, and it is not clear why it took that long. Self-reporting should occur at the earliest opportunity.
- [23] The Panel also observes that more than a year passed before a complaint was brought, and then another five months passed before there was an agreed outcome. The Panel would expect compliance issues to be dealt with in a timely manner.

Overall assessment and process for arriving at an agreed position

- [24] Standing back, the Panel concurs that an overall penalty of \$65,000 is appropriate. This appropriately recognises the severity of the breach and Transpower's remedial actions following the event.
- [25] In reaching that agreed position, the Parties have engaged in a series of meetings and correspondence to find a mutually acceptable way of addressing a disagreement about the interpretation of cl 30.1B. Ultimately, the agreement and the Panel's endorsement are based on a comparison of Transpower's conduct with that considered in precedent decisions.

[26] In terms of the disagreement about the interpretation of cl 30.1B, the Joint Memorandum noted Transpower’s intention to seek an out-of-cycle review of cl 30.1B once this proceeding has concluded and that the Authority is willing to engage in that review. The Panel encourages the parties to expedite that review to remove the need to continue to reserve their respective positions in future matters.

### Costs

[27] The Authority seeks costs of \$3,820, representing the costs associated with preparing and filing the Notice (\$1,910) and these submissions (\$1,910), calculated by reference to the District Court scale on a 2B basis as has been the practice for previous cases resolved by agreement (but noting that the Authority continues to reserve its position as to whether some other method of calculation may be appropriate for future cases).

[28] As the Panel observed in its decision of 21 August 2022, it may make an order for contribution to its own costs particularly in circumstances where there is limited or no industry or public service value in the proceedings. The parties do not view this as a case involving continued and wilful breaches that put an unwarranted burden on other industry participants, and while there is no obvious industry service in the proceeding, Transpower has taken a responsible approach to minimising cost. Accordingly, an order for the Panel’s own costs would not be appropriate.

### **Orders**

[29] The Rulings Panel orders that Transpower:

- (a) pay a pecuniary penalty of \$65,000; and
- (b) pay the Authority the sum of \$3.820 in costs.

[30] This decision is, in accordance with regulation 44 of the Electricity (Industry) Regulations, to be published by the Electricity Authority within ten (10) working days of receipt.

### **Recommendation to Amend the Regulations**

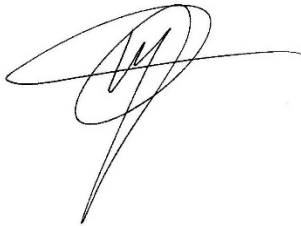
[31] Section 54(1)(i) of the Electricity Industry Act states that, on determining a complaint, the Rulings Panel may recommend to the Minister that a change should be made to the regulations or the Act.

[32] The Panel restates its recommendation that Subpart 2 of the Electricity Industry (Enforcement) Regulations 2010, which provides for limitations of liability when the Panel makes a remedial order for a breach under section 54 of the Electricity Industry Act, be amended to reflect the increase in the maximum pecuniary penalty under section 54(1)(d) from \$200,000 to \$2 million.

## Right to Appeal

[33] The right to appeal Panel decisions is set out in sections 64 and 65 of the Act.

Issued this 23<sup>rd</sup> day of December 2024

A handwritten signature in black ink, consisting of a large, stylized 'M' followed by a horizontal line and a vertical stroke extending downwards.

**M.J. Orange**  
Rulings Panel Chair