

SETTLEMENT AGREEMENT

(Regulation 24(1) of Electricity Industry (Enforcement) Regulations 2010)

DATED:

BETWEEN:

- (1) Mighty River Power Limited of 23-29 Albert Street, Auckland (MRPL);
 - (2) Genesis Power Limited of 602 Great South Road, Greenlane, Auckland (Genesis);
 - (3) Transpower New Zealand Limited as System Operator of 96 The Terrace, Wellington (System Operator); and
 - (4) Meridian Energy Limited of 33 Customhouse Quay, Wellington (Meridian);
- (Collectively the **parties**).

BACKGROUND:

- (A) On 12 and 18 February 2010, MRPL failed to comply with the plan, which had previously been agreed with the System Operator, for commissioning of Nga Awa Purua (NAP) geothermal power plant. On 27 April 2010, MRPL self-reported these two potential breaches of rule 2.7 of technical code A of schedule C3 of part C of the Electricity Governance Rules 2003 (Rules).
- (B) In relation to the incident on 12 February 2010, the System Operator also alleged a breach of rule 4.11 of section III of part G of the Rules.
- (C) In accordance with regulation 69 of the Electricity Governance Regulations 2003, on 30 August 2010 the Electricity Governance Committee appointed an investigator to investigate the Alleged Breaches.
- (D) Meridian and Genesis joined the investigation as interested participants.
- (E) The parties have agreed to settle the self-reported and alleged breaches on the terms contained in this Agreement.
- (F) On 1 November 2010, the Electricity Commission was disestablished and the Electricity Authority was established. The Electricity Governance Regulations 2003 were revoked and replaced by the Electricity Industry (Enforcement) Regulations 2010. The Electricity Governance Rules Committee was also replaced by the Electricity Authority's Compliance Committee.

IT IS AGREED:

1. Interpretation

1.1 In this Agreement, unless the context requires otherwise:

- (a) **Agreement** means this settlement agreement;
- (b) **Alleged Breaches** means the alleged breaches of the Rules arising from the Circumstances and described in clause 2;
- (c) **Approval Date** means the date the parties to this Agreement are notified that the Electricity Authority has approved this Agreement under regulation 24(4) of the Regulations;
- (d) **Authority** means the Electricity Authority which was established on 1 November 2010;
- (e) **Board** means the Board of the Electricity Authority;
- (f) **Circumstances** means the circumstances set out in clause 3;
- (g) **Commission** means the Electricity Commission which was disestablished on 1 November 2010;
- (h) **Regulations** means the Electricity Industry (Enforcement) Regulations 2010;
- (i) **Rules** means the Electricity Governance Rules 2003;
- (j) Unless the context requires otherwise, all terms not defined in this Agreement have the meanings ascribed in the Regulations or the Rules (as the case may be); and
- (k) all references to clauses are to clauses of this Agreement.

2. Alleged Breaches

2.1 MRPL self-reported that it breached rule 2.7 of technical code A of schedule C3 of part C of the Rules.

2.2 Rule 2.7 of technical code A of schedule C3 of part C provides:

2. General requirements

2.7 Asset owner to follow commissioning or testing plan

Once assessed by the **system operator** acting reasonably, the **asset owner** will follow the commissioning or test plan at all times, unless otherwise agreed with the **system operator** (which agreement will not be unreasonably withheld where compliance with the commissioning or testing plan is not practicable and non compliance would not impact on the **system**

operators ability to comply with its **principal performance obligations** or on other **asset owners**).

- 2.3 The System Operator alleged that MRPL breached rule 4.11 of section III of part G by failing to comply with dispatch instructions issued for NAP. Rule 4.11 of section III of part G provides:

4. The dispatch process

4.11 Dispatch instructions will be complied with

Each **generator** or **ancillary service agent** will comply with all **dispatch instructions** properly given by the **system operator** in accordance with rule 4.6 or rule 4.7 except where:

Note: None of the listed exemptions apply in this case.

3. Circumstances of the Alleged Breaches

Breaches of rule 2.7 of technical code A of schedule C3 of part C

- 3.1 MRPL was commissioning NAP from January to March 2010. Prior to the commissioning, MRPL submitted a commissioning plan to the System Operator. This included a schedule of tests and a test plan form which stated that a “specific test and system requirements will be discussed and agreed with the System Operator prior to and on a daily basis closer to the commissioning period”.
- 3.2 When the test plan form was returned to MRPL by the System Operator, the evaluation conditions on it stated that MRPL was to confirm 2 hours, 15 minutes, and immediately prior to tests that the tests can proceed as planned. The System Operator has advised that these communication conditions were intended to apply to tests which may impact on system security, albeit that this was not specifically identified on the test plan form.
- 3.3 Accordingly, MRPL did not adhere to the stated conditions for every test during the commissioning of the plant. However, for a number of tests (e.g. system bump tests) an additional test plan form was submitted and the conditions adhered to by MRPL for that particular test.
- 3.4 In a letter dated 3 February 2010, which MRPL and the System Operator agree forms part of the commissioning plan, the System Operator states that “to assist both parties with planning, a day-ahead commissioning activity plan is to be submitted by 11:30 the previous day. This allows time for the System Operator to consider planned commissioning activities in the context of wider grid activities”. This requirement was adhered to by MRPL with daily testing

schedules being submitted via email along with an indication of the risk of a trip for each test (e.g. nil, low, medium, high, certain).

- 3.5 On 12 February 2010, NAP was offered to generate at 42MW during trading period 33 for the purpose of testing. During the trading period the plant was incorrectly pressurised to ramp to the set point in the following trading period and therefore had to be depressurised before a return to set point could be safely achieved. This was not able to be achieved before the end of the trading period. The operator contacted the trader who advised the System Operator as soon as the problem became apparent.
- 3.6 MRPL advised the Commission that it breached rule 2.7 of technical code A of schedule C3 of part C of the Rules by failing to comply with the commissioning plan when it generated more than 1MW above the agreed level.
- 3.7 On 18 February 2010, NAP was scheduled to conduct a vacuum test which was noted in the submitted schedule as having a high risk of a trip. This test commenced as scheduled at 11:30 and the plant subsequently tripped at 11:37. This tripping coincided with a trip of the HVDC at 11:42 which was due to a fire under the cable. MRPL did not call the System Operator to coordinate the test before the test started as was required under the agreed test plan.
- 3.8 MRPL advised the Authority that it breached rule 2.7 of technical code A of schedule C3 of part C of the Rules by failing to comply with the commissioning plan by not coordinating the test with the System Operator.

Potential breach of rule 4.11 of section III of part G

- 3.9 MRPL is of the view that the deviation from the set-point on 12 February 2010 was not a breach of rule 4.11 of section III of part G of the Rules and that reporting a breach of rule 2.7 of technical code A of schedule C3 of part C was more appropriate in this case.
- 3.10 As part of the commissioning plan for NAP, MRPL had an agreement with the System Operator that stated, among other things, that the station output would not exceed 1MW above the dispatch setpoint, and that there would be no provision for a bona fide increase in output.
- 3.11 The Investigator is of the view that non compliance with rule 2.7 of technical code A of schedule C3 of part C associated with plant commissioning or testing poses a higher risk to the system security than non compliance with rule 4.11 of section II of part G which is associated with a normal plant operation. MRPL considers that when MRPL deviated from the dispatch by more than 1 MW, MRPL breached rule 4.11 of section III of part G. However, in this particular case the breach of rule 4.11 of section III of part G could be

considered as consequential to the breach of rule 2.7 of technical code A of schedule C3 of part C. The System Operator agreed with this view.

4. Impact of the Breaches

- 4.1 The Parties agreed that the market impact should be recorded as negligible.
- 4.2 At the same time, the System Operator assessed that the non-compliance with the test plan as part of the commissioning plan created potential security issues for the System Operator.
- 4.3 The System Operator advised that on 18 February 2010 it was monitoring the HVDC situation from before 11:30, being the time NAP commenced the vacuum test. Had MRPL phoned to confirm the test, it was likely that the System Operator would have advised that the grid was at risk and that the test should be postponed. Due to the fact that NAP tripped during the test, the effects of the HVDC trip were compounded.

5. Steps taken to prevent recurrence

- 5.1 On 12 February 2010, the MRPL trader immediately advised the System Operator of the mistake and the System Operator determined that there was no immediate risk to the grid. MRPL had also advised the System Operator that best endeavours would be made to keep the output at minimum for the remainder of the trading period.
- 5.2 There have been a number of issues that arose from the recent commissioning of NAP. MRPL met with the System Operator to discuss and review the commissioning process in order to record key lessons and institutionalise them prior to the commissioning of other generation plants in the future.

6. Resolution

6.1 In consideration of the obligations of each party to the others under this Agreement the parties hereby agree that:

- (a) MRPL will finalise within 6 months after the date of approval of this Agreement, a Generation Connection Framework. MRPL will implement it as a standard procedure for commissioning and testing of generation assets, based on identification of tastes that may affect the system security in real time;
- (b) MRPL will, as part of planning for future commissioning and asset testing, agree with the System Operator communication protocols and requirements in respect of specific tests based on the assessment of the risks that these tests pose. MRPL will use these communication protocols and requirements for all future commissioning and testing of generation assets;
- (c) MRPL will ensure that any of its staff involved in future commissioning and testing operations is properly trained and briefed on risks associated with commissioning and testing as well as on agreed communication protocols and requirements in respect of specific tests;
- (d) the System Operator will request asset owners include, as part of all commissioning plans, detailed testing requirements for all tests that have been identified by the asset owner or the System Operator as posing risk to system security;
- (e) the System Operator will consider, in coordination with the Electricity Authority, the merits of undertaking a broader industry forum on commissioning and asset testing.

7. Confidentiality

7.1 If the Board decides under regulation 25(2) of the Regulations not to publicise any part of this Agreement, each party will treat that part of the Agreement as confidential information and will not disclose it other than:

- (a) to the party's employees or contractors who need to know the confidential information to implement or monitor the implementation of this Agreement;
- (b) to the party's professional advisers, auditors and bankers;
- (c) as required by law or for the purposes of judicial proceedings;
- (d) as required by any securities exchange or regulatory or governmental body to which the party is subject or submits; or
- (e) as authorised in writing by the other parties.

7.2 A party must not disclose confidential information under clause 7.1(a) or (b) unless the party obtains a confidentiality undertaking from the person to whom the confidential information is to be disclosed on terms no less onerous than those set out in this clause 7 before disclosing the confidential information. Any confidential information to be disclosed in the circumstances set out in clause 7.1(c) or (d) may only be disclosed after written notice to the other parties (unless the disclosing party is prevented from notifying the other parties by law).

8. Agreement Subject to Approval

8.1 Subject to clause 8.2, this Agreement will come into effect on the Approval Date.

8.2 Clause 7 is binding on the parties as from the date of this Agreement. Pending the Board's approval or rejection of this Agreement under regulation 24(4) of the Regulations, clause 7 will apply as if the Board has decided under regulation 25(2) of the Regulations not to publicise any part of this Agreement or the existence of this Agreement.

9. Settled Breaches

9.1 This Agreement is in full and final settlement of all claims, actions and demands against any party (under the Regulations, the Rules or otherwise) in relation to:

- (a) the Alleged Breaches; and
- (b) any other breaches of the Rules involved in or arising from the Circumstances that the claiming party ought reasonably to have known about at the date of this Agreement,

(the Alleged Breaches and such other breaches together the **Settled Breaches**).

9.2 Pursuant to regulation 24, but subject to regulation 26 of the Regulations, this Agreement is also binding on the Board and all participants who are not a party to this Agreement to the effect that:

- (a) the Board may not on its own initiative instigate a further breach investigation, or take any enforcement action in respect of, the Settled Breaches; and
- (b) a participant who is not a party to this Agreement may, subject to and in accordance with regulation 26 of the Regulations, make a further notification under regulation 7 or 8 of the Regulations in relation to a Settled Breach, and the Board may then take all or any of the steps provided for in the Regulations despite this Agreement.

10. General

10.1 Each party will execute all documents and do, or refrain from doing, all other reasonable things necessary or desirable to give full effect to the provisions of this Agreement, including to secure the Board's approval of this Agreement under regulation 24(4)(a) of the Regulations.

10.2 This Agreement is the whole and only agreement between the parties relating to the settlement of claims, actions and demands arising from the Circumstances. Each party acknowledges that it has not been induced to enter into this Agreement by any representation made by or on behalf of the other party that is not repeated in this Agreement.

10.3 This Agreement may be signed in any number of counterparts.

SIGNED:

For Mighty River Power Limited

Name:

Position:

SIGNED:

For Genesis Power Limited

Name:

Position:

SIGNED:

For Transpower New Zealand Limited

Name:

Position:

SIGNED:

For Meridian Energy Limited

Name:

Position: