

Operational Performance Report to the Electricity Authority Board October 2010

Purpose

This report summarizes the results of the System Operator's review of its performance for October 2010, as required under Clause 3.14 of the Electricity Participation Code. An additional Operational Update is also provided for the information of the Authority.



SYSTEM OPERATOR

Keeping the energy flowing

TRANSPOWER



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1. COMPLIANCE WITH RULE BOOK, PART C AND REGULATIONS:

1.1 PRINCIPAL PERFORMANCE OBLIGATIONS (PPOs)

The Principal Performance Obligations (PPOs) of the System Operator are to act as a reasonable and prudent operator with the objective of meeting certain PPO outcomes.

The System Operator's performance against the PPO outcomes, during October, was as follows:

PPO No	Description	PPO Outcome
2.1	Avoid cascade failure	Met
2.2.1	Maintain frequency in the normal band	Met
2.2.2	Manage frequency during momentary fluctuation	Met
2.2.3	Limit rate of occurrences of momentary fluctuations	Met
2.2.4	Recover quickly from a fluctuation	Met
2.2.5	Manage time error	Met
2.2.6	Eliminate time error once a day	Met
2.3	Maintain other standards	Met
5.0	Restoration objective	Met

1.2 GRID EMERGENCIES

There were six grid emergencies declared in the period.

Grid Emergencies			
Date	Time	Summary Details	Island
05/10/10	17:32	Grid Emergencies were declared for insufficient generation offers in the Upper North Island and insufficient transmission capacity in the Waikato region. The grid was re-configured at KIN to alleviate the situation.	N
08/10/10	09:20		
26/10/10	07:04	Grid Emergencies were declared for insufficient generation offers in the Upper North Island and insufficient transmission capacity in the Waikato region. The grid was re-configured at KIN to alleviate the situation.	N
27/10/10	07:15		
29/10/10	07:37		
27/10/10	11:34	A Grid Emergency was declared to allow for grid re-configuration around Kinleith Substation to assist with restoration of supply following a loss of connection.	N



1.3 SYSTEM EVENTS

There was one system event (frequency excursion) during the reporting period:

Date	Time	Summary Details	Island	Freq (Hz)
04/10/10	11:45	An emergency Tiwai potline off-loading resulted in a momentary rise in frequency in the South Island.	S	50.63 Hz

1.4 CONNECTION POINT EVENTS

There were two connection point events during the reporting period:

Date	Time	Summary Details	Generation/Load interrupted (MW)	Restoration time (minutes)
27/10/10	11:28	110 kV Arapuni-Kinleith Circuits 1 & 2 tripped causing a loss of connection to Kinleith as a system split had been previously put in place on the Kinleith – Tarukenga Circuits.	86	29
30/10/10	09:58	Hinuera 110 / 33 kV supply transformers T1 & T2 tripped resulting in a loss of connection to Hinuera.	33	115

1.5 SYSTEM OPERATOR COMPLIANCE WITH RULE BOOK: PART C

During October, the System Operator notified one Part C breach for failing to give participants as much notice as is reasonably practicable in implementing a temporary security constraint.

1.6 PARTICIPANT COMPLIANCE

During October, the System Operator notified no alleged Part C breaches against participants.

1.7 APPLICATIONS FOR DISPENSATIONS

During October, there were no new dispensation applications received by the System Operator. There were no dispensations granted by the System Operator, however four dispensations were issued in draft and three dispensations were cancelled.

2. PART G COMPLIANCE

2.1 SYSTEM OPERATOR COMPLIANCE

One breach of Part G was reported by the System Operator during the month of October 2010 for failing to use the current output levels of each generator in preparing the Schedule of Dispatch Prices and Quantities (SDPQ).

2.2 PARTICIPANT COMPLIANCE

No participant breach of Part G was reported by the System Operator during the month of October 2010.



3. ANCILLARY SERVICES

3.1 SUMMARY OF PROCURED ANCILLARY SERVICES

The following is a summary of the contracted ancillary services, as at October 2010:

Ancillary Service Agent	(1)FK	(2)IR	(3)OFR	(4)BS	(5)VS
Meridian Energy	√	√	√*	√*	
Contact Energy	√*	√*	√*		√*
Mighty River Power	√	√	√*	√*	√*
Genesis Power	√	√		√	
TrustPower		√*			
Vector		√			
Northpower		√			
Powerco		√*			
Unison		√			
WELNetworks		√			
CountiesPower		√			
NZ Steel		√*			
Pan Pac		√			
Winstone Pulp International		√*			
KCE Mangahao and Todd Mangahao		√*	√*		
Norske Skog		√*			
Energy Response		√			
NZ Aluminium Smelters		√*			
Nga Awa Purua Joint Venture			√*		
Tuaropaki Joint Venture			√*		

(1) FK - Frequency Keeping

(2) IR - Instantaneous Reserves

(3) OFR - Over Frequency Reserve

(4) BS - Black Start

(5) VS - Voltage Support

*Longer term contract



3.2 PROCUREMENT PLAN

The System Operator signed contracts with four North Island Over Frequency Reserve Providers during October (Mighty River Power, Nga Awa Purua Joint Venture, Tuaropaki Joint Venture and Todd Energy Limited). These contracts took effect on 1 November. The planned outages for which the over frequency reserve was originally procured are scheduled for mid-November.

The System Operator is still progressing its evaluation of the tender for Zone 1 voltage support.

In October, the System Operator tendered for Instantaneous Reserve, Frequency Keeping, South Island Over Frequency Reserve and Black Start for the Procurement Plan commencing 1 December 2010. Tenders were received for all tendered services. In total, the System Operator received tenders from ten ancillary service agents for the provision of ancillary services.

Tender evaluation and awarding of contracts is underway with a completion date of 1 December 2010, when the new contracts will come into effect.

4. RECOMMENDATIONS FOR CHANGE TO EGRs AND RELATED MATTERS

4.1 RULE CHANGE PROPOSALS

No rule change proposals were made in October 2010.

4.2 EXEMPTION APPLICATIONS

No exemption applications were made during the month of October 2010.

5. OPERATIONAL UPDATE:

5.1 COMMISSIONING OF GENERATION ASSETS

The following table is a summary of active, publicly disclosed commissioning projects where the System Operator is involved:



Summary of generator commissioning			
Generator Name	Asset Owner	Description	Status
Nga Awa Purua	Mighty River Power	A second geothermal power station at Rotokawa.	Assessing final ACS.
Te Rere Hau	NZ Windfarms	A new wind farm development located in the Tararua Ranges.	Commissioning activities commenced in 2009.
West Wind	Meridian Energy	A new wind farm development located close to Wellington.	Assessing final ACS.
Stratford Peaking Plant	Contact Energy	Two 100MW gas fired peaking units to be located close to the existing Stratford power plant.	Expected to commence commissioning activities November 2010.
Te Uku	Meridian Energy	A new wind farm connection at Te Kowhai Substation	Commission activities to commence in November 2010.

6. CONFLICTS OF INTEREST

There were no new conflicts of interest arising during the month of October 2010.

7. DEVELOPMENT AND RESOURCES

During October, in addition to routine operations, System Operator resources were applied as follows:

- Preparation work for the December 2010 SSF;
- Parallel operations for SFT continued during October;
- Continued work with Transpower's HVDC project to define tool changes; required for the commissioning of Pole 3;
- Report provided to EA on review of gate closure.
- Preparation for transfer of emergency management and security of supply functions.

8. REGULATION 50 (4) STATEMENT

Regulation 50 (4) Statement:

In performing its role as System Operator, Transpower New Zealand Limited (Transpower) has not been materially affected by any other role or capacity Transpower has under the Electricity Governance Regulations 2003 or the Rules or under any agreement.

