

# Operational Performance Report to the Electricity Commission March 2010

## Purpose

This report summarizes the results of the System Operator's review of its performance for February 2010, as required under Regulation 45 of the EGR's. An additional Operational Update is also provided for the information of the Commission



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 the month, 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 no grid emergencies reported in the period:

## 1.3 SYSTEM EVENTS

There were 5 system events (frequency excursions) during the reporting period:

Date	Time	Summary Details	Island	Freq (Hz)
9 March 2010	15:45	Huntly unit tripped causing a momentary drop in frequency in the North Island.	North South	49.2 49.47
12 March 2010	07:31	An HVDC Pole 2 operation caused momentary drop in frequency in the South Island.	South	49.45
12 March 2010	19:43	A planned shutdown of Otahuhu station resulted in a momentary drop in frequency in the North Island.	North	49.48
14 March 2010	10:43	A Manapouri unit tripped caused a momentary drop in frequency in the South Island.	South	49.42
22 March 2010	15:17	An emergency Tiwai potline reduction resulted in a momentary rise in frequency in the South Island.	South	50.7

## 1.4 CONNECTION POINT EVENTS

There were 4 connection point events during the reporting period:

Date	Time	Summary Details	Generation/Load interrupted (MW)	Restoration time (minutes)
6 March 2010	11:54	Central Park-Westwind-Wilton 3 circuit and Central Park T3 supply transformer tripped resulted in a loss of connection at Westwind.	56	140
16 March 2010	08:39	Cromwell-Frankton 2 circuit tripped while Cromwell-Frankton 1 was out of service for a planned outage, resulted in a loss of connection at Frankton.	21	70
20 March 2010	21:36	Benmore T2 interconnecting transformer tripped resulting in a partial loss of connection at Benmore.	80	1304
31 March 2010	05:53	Whirinaki T1 supply transformer tripped resulting in a partial loss of connection at Whirinaki.	43	37

## 1.5 SYSTEM OPERATOR COMPLIANCE WITH RULE BOOK: PART C

During March, the System Operator notified two Part C breaches. Both breaches related to the System Operator failing to issue dispatch instructions to generators and ancillary service agents in a reasonable and timely manner.

## 1.6 PARTICIPANT COMPLIANCE

The System Operator notified no alleged Part C breaches against participants in March 2010.

## 1.7 APPLICATIONS FOR DISPENSATIONS

During March 2010, the System Operator received 4 requests to withdraw dispensations. No applications for dispensations were received during the month.

## 2. PART G COMPLIANCE

The System Operator reported no breaches by the System Operator of Part G during the month of March.

### 2.1 PARTICIPANT COMPLIANCE

Three breaches of Part G were reported by the System Operator during the month of March in respect of non-compliance by participants with dispatch instructions.

### 3. ANCILLARY SERVICES

#### 3.1 SUMMARY OF PROCURED ANCILLARY SERVICES

The following is a summary of the contracted ancillary services, as at March 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		√*			

\* denotes longer term contract

FK      Frequency Keeping  
OFR     Over Frequency Reserve  
BS      Black Start

IR      Instantaneous Reserves  
VS      Voltage Support

#### 3.2 REVIEW OF PROCUREMENT PLAN

The System Operator visited key participants during early March in relation to the procurement plan annual review. Following these visits, a draft procurement plan was released for consultation in late March.

The changes proposed by the System Operator this year are relatively minor and include:

- changes to provide the System Operator with more flexibility in procuring ancillary services;

- recording the System Operator’s intention to explore options regarding changes to data monitoring resolution requirements; and
- providing for flexibility in the testing requirements for over frequency reserve.

Any submissions received as a result of this consultation will be considered during April and it is planned to provide the “final” draft procurement plan to the Commission in early May.

## **4. RECOMMENDATIONS FOR CHANGE TO EGRS AND RELATED MATTERS:**

### **4.1 RULE CHANGE PROPOSALS**

There were no rule changes proposed by the System Operator during March 2010.

### **4.2 EXEMPTION APPLICATIONS**

There were two exemption applications submitted by the System Operator in March 2010 relating to implementing the initiatives arising from the winter initiative project. These were:

- allowing for the reduction of the SRC notice publication threshold prior to a change to the policy statement being effected in this regard; and
- recognising the timeframe required for the System Operator to add the CVPs to the SPD software.

### **4.3 ANNUAL POLICY STATEMENT REVIEW**

The System Operator completed its annual policy statement review during March and the draft policy statement was submitted to the Commission on 31 March. The key changes proposed in the draft policy statement related to those recommended as part of the System Operator’s credible event management policy review in 2009. Following provision of the draft policy statement to the Commission, the System Operator identified two further changes resulting from the winter initiatives project (relating to variable reserves and publication of the SRC notices) and has requested the Commission to include these as part of its consultation on the draft policy statement.

## **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	Commissioning tests have been completed. Awaiting final ACS prior to completing final assessment.
Te Rere Hau	NZ Windfarms	A new wind farm development located in the Tararua Ranges	Commissioning activities commenced and will continue in 2010 as new turbines are connected.
West Wind	Meridian Energy	A new wind farm development located close to Wellington	Commissioning is ongoing.
Stratford peaking plant	Contact Energy	Two 100MW gas fired peaking units to be located close to the existing Stratford power plant.	Commissioning planning is underway.

## 6. CONFLICTS OF INTEREST

The System Operator continues to manage the conflict of interest identified in its August report relating to the potential under frequency event charges arising from the 1 August 2009 and 17 January 2010 under frequency events.

## 7. DEVELOPMENT AND RESOURCES:

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

- Preparation work for the December 2010 SSF.
- The new web-based dispensations database went live in early March.
- Starting operational testing of SFT. This testing process will continue until late June.
- Preparing a report to the Commission on implementing stage 1 of AGC as part of the multiple frequency keeper's project.
- Implementation of winter initiatives.
- Working with the Commission on transitioning existing security of supply and emergency management rules and regulations into codes.
- Participated in market development programme technical working groups – the locational hedging group and scarcity pricing group.
- Production of a preliminary engineering analysis of AUFLS requirements.
- Annual reviews of Policy Statement and Procurement Plan.



## 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.