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Status Report prepared under  
clause 7.12 of the Market Rules by  
System Management  
22 December 2010 – 21 March 2011

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# 1 Introduction

## 1.1 System Management

Western Power is established under section 4(1)(b) of the *Electricity Corporations Act 2005* and has the functions conferred under section 41 of that act.

Part 9 of the *Electricity Industry Act 2004* makes provision for a wholesale electricity market and provides for the establishment of Market Rules.

One of the core functions undertaken by Western Power is the management of the electricity transmission and distribution networks. Regulation 13 of the *Electricity Industry (Wholesale Electricity Market) Regulations 2004* provides that the Market Rules may confer on an entity the function of operating the SWIS in a secure and reliable manner.

Clause 2.2 of the *Wholesale Electricity Market Amending Rules (September 2006)* (**Market Rules**) confers this responsibility upon the segregated (“ring fenced”) business unit of Western Power known as System Management. Amongst these responsibilities, the functions of System Management are to:

- release information required by the Market Rules;
- monitor rule participants compliance with the Market Rules relating to dispatch and power system security and power system reliability; and
- provide regular reports to the IMO and other market participants.

Included in the requirement to monitor and report is this Status Report, described in clause 7.12 of the Market Rules.

## 1.2 Status Report

System Management has prepared this report pursuant to its obligations under clause 7.12 of the Market Rules, for the period 22 December 2010 to 21 March 2011.

# 2 Issuance of Dispatch Instructions

During the period, System Management issued a total of 374 Dispatch Instructions to Market Participants.

Of these, 38 were “minimum MW” instructions, 154 were “target MW” instructions, and 182 were instructions to return to the Resource Plan.

# 3 Non-compliance with Dispatch Instructions

No instances of non-compliance with Dispatch Instructions occurred.

# 4 Transmission constraints

A “transmission constraint” refers to the configuration of the transmission network that has an effect or potential effect of constraining or otherwise varying the output of a generator. The resultant situation has a generation facility either decrease output, or not increase output as it would if the constraint did not exist.

System Management has identified zero instances of potential or actual transmission constraints during the relevant period that meet the definition above. This does not include any potential or actual transmission constraints arising because of commercial decisions taken by market participants. This also does not include situations where a generator is unable to operate due to planned or unplanned Network outages.

## 5 Shortfalls in Ancillary Services

No instances of shortfalls in Ancillary Services occurred.

## 6 Involuntary curtailment of load

One instance of involuntary curtailment of load.

On 15 February at 13:00:08 hours approximately 400MW of generation was lost due to the failure of a large generator in the Collie Region and the online reserve generation was 330MW, this generally being the largest generator at any one time. Whilst this was in accordance with the SWIS Technical Code and WEM requirements, in this instance was insufficient and thus resulted in involuntary load shedding to prevent the SWIS entering an unsafe operating state.

At 13:02:08 the frequency declined to 48.75hz and was a stage 1 Under Frequency Load Shedding (UFLS).

At 13:07:40 the system frequency returned to the normal 50:00hz.

## 7 High Risk Operating State

Four instances of a High Risk State occurred.

1. On trading day 8 January 2011 due to a system load in excess of 80 MW lower than forecasted a High Risk State was called for intervals 3:2 to 6:2. No Dispatch Instructions were required.
2. On trading day 10 February 2011 a High Risk State was called due a total loss of SCADA visibility and control. The High Risk State was required for intervals 14:1 to 16:1. No Dispatch Instructions were required and no further action by System Management was required.
3. On trading day 15 February 2011 due to the trip of a number of Independent Power Producers causing a loss of over 400MW of generation. As a result a Stage One Under Frequency Load Shedding (UFLS) occurred and a High Risk State was called for interval 13:1. No Dispatch Instructions were required. Further information is listed above in Section 6. Involuntary Curtailment of Load.
4. On Trading day 23 February a High Risk State was called due to a notification by the Office of Energy that a Red alert status was in place due to issues with gas supply. The High Risk State commenced at interval 15:1 on 23 February and continued until interval 20:1 on 01 March 2011. During this period System Management issued a total of 319 Dispatch Instructions. The High Risk State necessitated the dispatch of Curtailable loads as required. The high number of Dispatch Instructions in this period is a result of System Operation Control (SOC) being required under Market Rules to issue Dispatch Instructions to individual loads rather than programs (ie multiple loads aggregated to a single program). This caused significant disruption with the System Control Room at a time of high system risk.

## 8 Emergency Operating State

No instances of an Emergency Operating State occurred.