



TRANSPOWER

Keeping the energy flowing

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Unplanned Failover to Stand Alone Dispatch, 19 March 2010

What happened?

Since the introduction of the market systems in July 2009 we have experienced very high availability. However more recently we have experienced an increased requirement to fall back to our Stand Alone Dispatch System (SAD). Last Saturday the Hamilton server on which our market systems were running failed as a consequence of an unprecedented co-incident failure to both the primary and backup power supply units. Consequently, the National Co-ordination Centre was required to dispatch from SAD for just under four hours (14:35 – 18:12). This was the time it took to diagnose the fault, determine the need to switch the systems to Wellington and effect the switch.

Why did it happen?

An initial review of this incident identified some issues with the switch-over process that delayed the resumption of service from Wellington. These are being addressed and changes will be made to our support arrangements. In addition, Saturday's equipment failure is being investigated with the supplier. As it happens, a server replacement programme is underway, with new server equipment now on site and expected to be operational mid-year.

The power supply units in Hamilton have also been replaced meaning full redundancy between the Wellington and Hamilton sites has now been restored.

Stand Alone Dispatch

SAD is an essential element of our market system arrangements. The application allows us to continue dispatch when our normal systems fail or are planned to be unavailable (for system changes to be made). The market systems are fully duplicated at Wellington and Hamilton and are switched between sites on a periodic basis to test both the switching process and the redundant site (we dispatch from SAD while the site switch occurs). The switch over is a multi staged process which typically takes between 1 – 1.5 hours, if planned in advance. During an unplanned event, with no time to prepare, this process takes longer. Automated failover between sites was considered in the original design of the system but the high degree of complexity this would have introduced would expose market participants to more rather than less risk.

We are very conscious of the fact that while using SAD the normal market offer process is, effectively, suspended. For that reason failure of any IT system must be

anticipated and planned for even if core redundancy is in place. We are continuing to investigate the root cause of this issue.

Availability of the Market System

Our objective is always to strive for increased availability and minimise the time on SAD, which continues to be effective as a primary fallback system should all else fail. Planned dispatch of SAD will continue to occur, as we upgrade the market systems and switch sites for normal operational purposes. We are making progressive improvements in the core systems including the monitoring tools we use and the processes we employ to improve the availability of the market system.

Yours sincerely



Kieran Devine
General Manager System Operations