

Incident Report

Incident Description

PJM's eMarket application experienced an outage on Monday, April 14, 2008

Summary

- On the weekend of April 12 / 13, PJM upgraded the ORACLE database that supports its eMarket application from version 9 to version 10 as part of ongoing efforts to remain at supported database versions.
- Many other PJM databases had been upgraded to version 10. PJM was confident in the technology and the upgrade process.
- The upgrade completed with no apparent issues and ran successfully throughout the day Sunday, April 13 and overnight into Monday, April 14.
- On Monday morning at approximately 0715 EDT the database failed. As a result, PJM's eMarket application was unavailable.
- After several unsuccessful attempts to restart the database, an Emergency Service Restoration (ESR) was convened. The database was restored from backup.
- At approximately 1920 EDT Monday, after verification that the database was functioning properly the eMarket application was made available to market participants for an abbreviated bidding period.
- After bids had been entered and as the market case was being processed, at about 2040 EDT, the database failed again with the same symptoms. Because it remained unclear what was causing the problem, PJM determined at this point to restore the pre-upgrade ORACLE 9 database. This was completed at approximately 1100 EDT on Tuesday, April 15.
- PJM has initiated efforts, including a Root Cause Analysis (RCA), to determine the source of the problem.
- PJM is also working with ORACLE experts to determine if any other version 10 databases have the potential to exhibit the problem that the eMarket database experienced.
- Until these efforts have identified a definitive resolution to the problem, PJM will continue to operate the eMarket application on the ORACLE 9 database version and will not upgrade any remaining version 9 databases to version 10.
- PJM will share any insights that come out of the RCA and ORACLE expert analysis.