



Information Technology Service Availability Metrics

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ERCOT Board of Directors

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Agenda and Commentary

▪ **Retail and Wholesale Systems Performance**

- **Retail Transaction Processing** – September performance was 98.98%. This was below the service level target of 99.9%
- **TML** – September performance was 99.92%. This was above the service level target of 99%
- **MarkeTrak** – September performance was 99.75%. This was above the service level target of 98%
- **TML Report Explorer** – September performance was 99.05%. This was above the service level target of 99%
- **Retail API** – September performance was 99.74%. This was above the service level target of 99%
- **Wholesale Total** – September performance was 100%

▪ **Market and Grid Control Systems Performance**

- **Real Time Balancing Market (RTBM), Frequency Control (FC)** – September performance levels were 100%

Agenda and Commentary (continued)

▪ **Nodal Systems Performance**

- **Grid Management systems** – September performance levels exceeded service level targets
- **Market Management and other select systems** – These were taken offline as notified to the Market via Market Notice, dated July 16, 2009. Nodal Market Notices are also posted at: <http://nodal.ercot.com/readiness/notices/index.html>

Agenda and Commentary (continued)

▪ **Retail Transaction Processing issues**

SLA Impacting

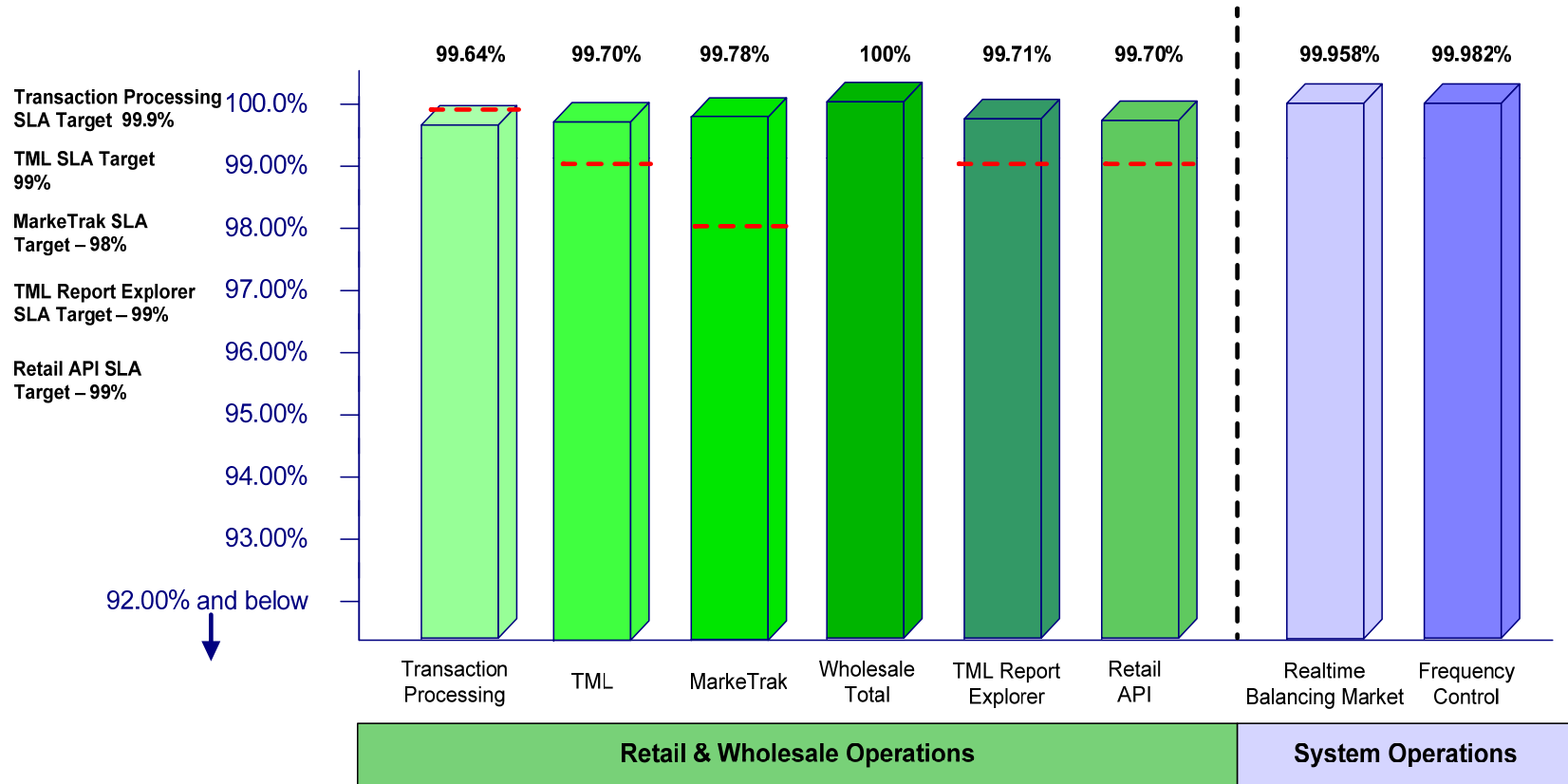
- 9/27/09: NAESB application received processing errors from a service provider following a planned Retail systems upgrade, resulting in an outage that impacted transaction processing for 372 Minutes. The NAESB application was rolled back to the previous version to restore the service. The upgrade of this application will be rescheduled following a more thorough test with the market

Other

- 9/28/09: Retail Transaction Processing performed in degraded mode for 660 minutes due to a database tuning issue. The issue was resolved by modifying a database parameter and recovering the performance. Backlogged transactions in the queue were processed within 1.5 hours of resolution. (Market Notice indicated an 8 hours backlog process time; however, later analysis showed that the backlog cleared within 1.5 hours)
- 9/29/09 to 10/01/09: Additional tuning efforts resulted in subsequent performance issues, which were corrected

2009 Net Service Availability

2009 Net Service Availability Through September 30th, 2009



September 2009 Net Service Availability

September 2009 Net Service Availability

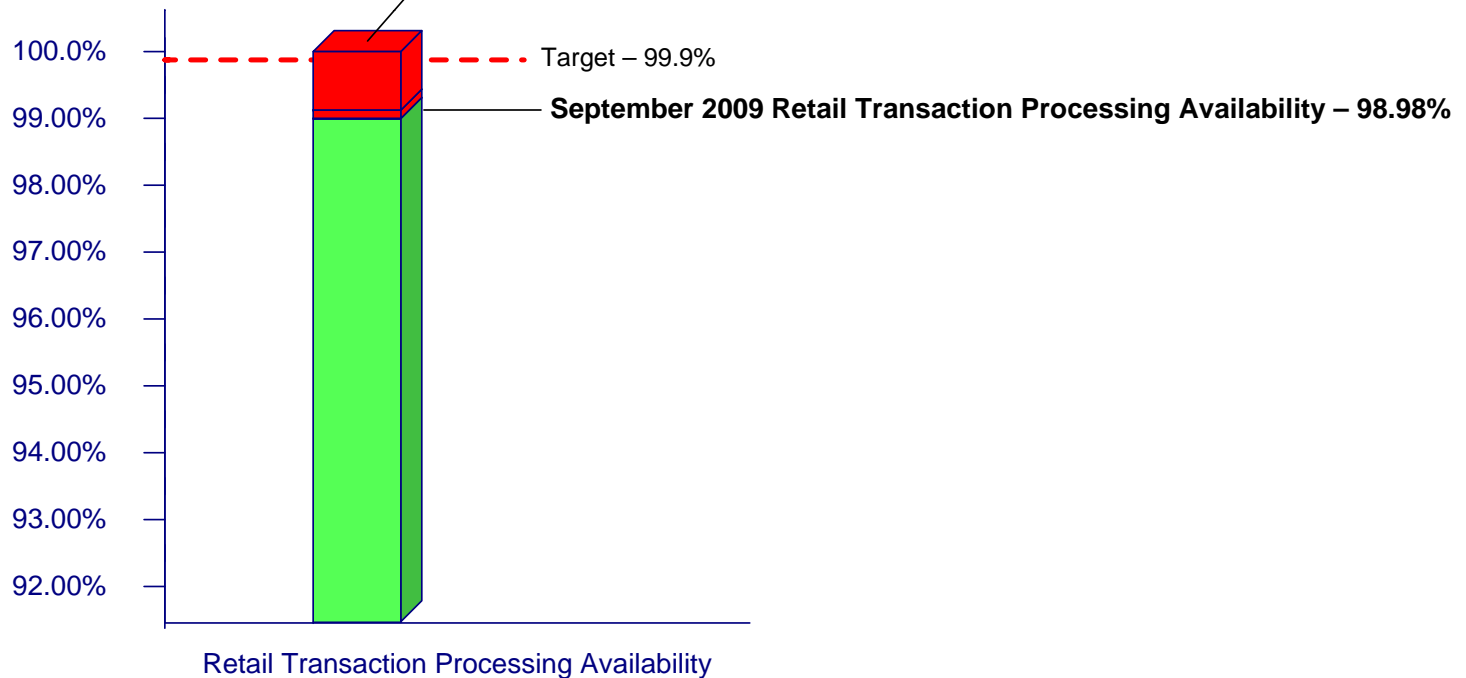


Retail Transaction Processing Availability Summary

September 2009 Retail Transaction Processing Availability Summary

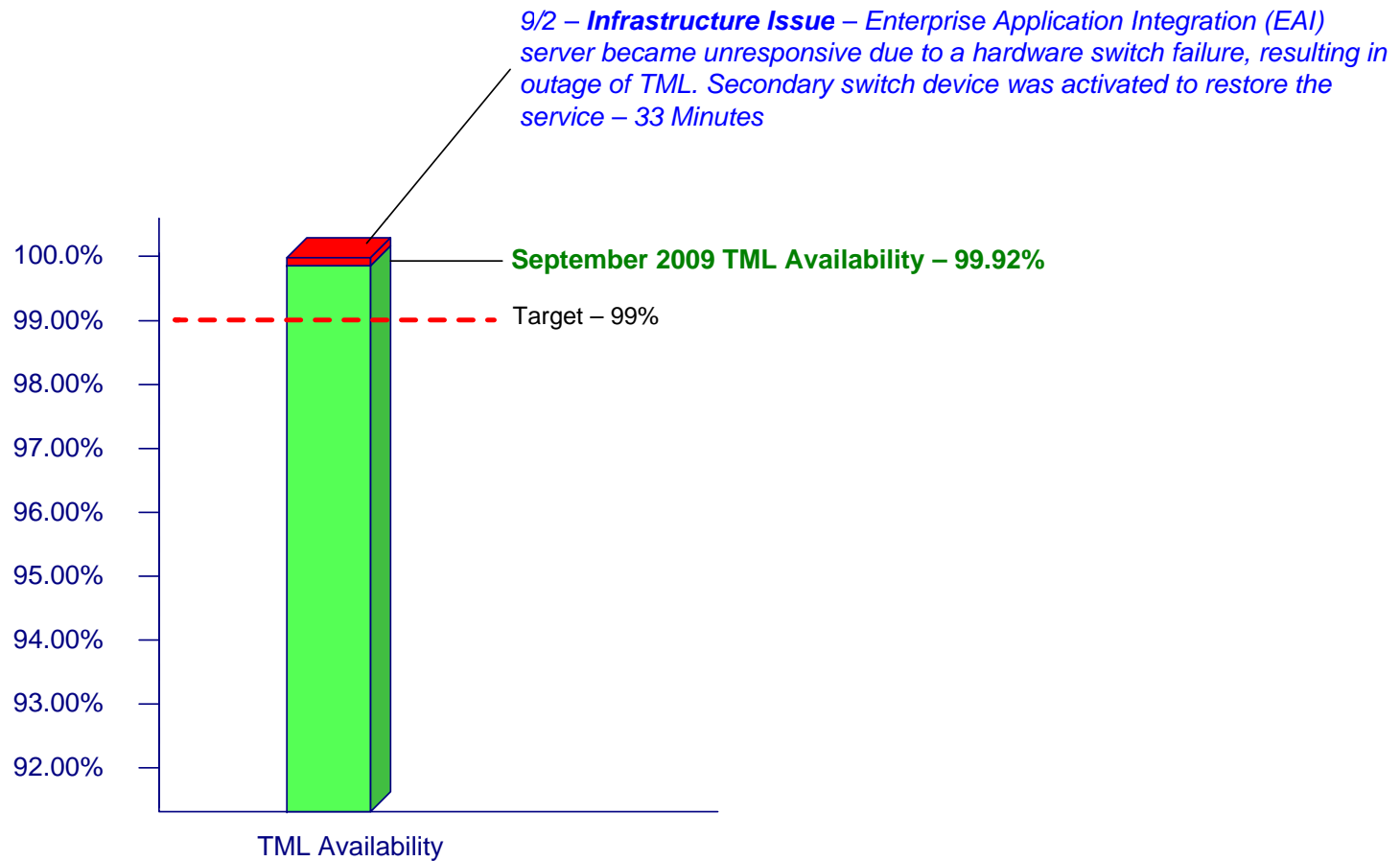
*9/27 – **Application Issue** - NAESB application received processing errors from a service provider following a planned Retail systems upgrade, resulting in an outage that impacted transaction processing. The NAESB application was rolled back to the previous version to restore the service – 372 Minutes*

*9/8 – **Infrastructure Issue** – EDI and NAESB servers became unresponsive due to a hardware switch failure, resulting in outage of the Retail application. The switch and applications were restarted to restore the service. A replacement of the switch is planned in upcoming maintenance window – 40 Minutes*



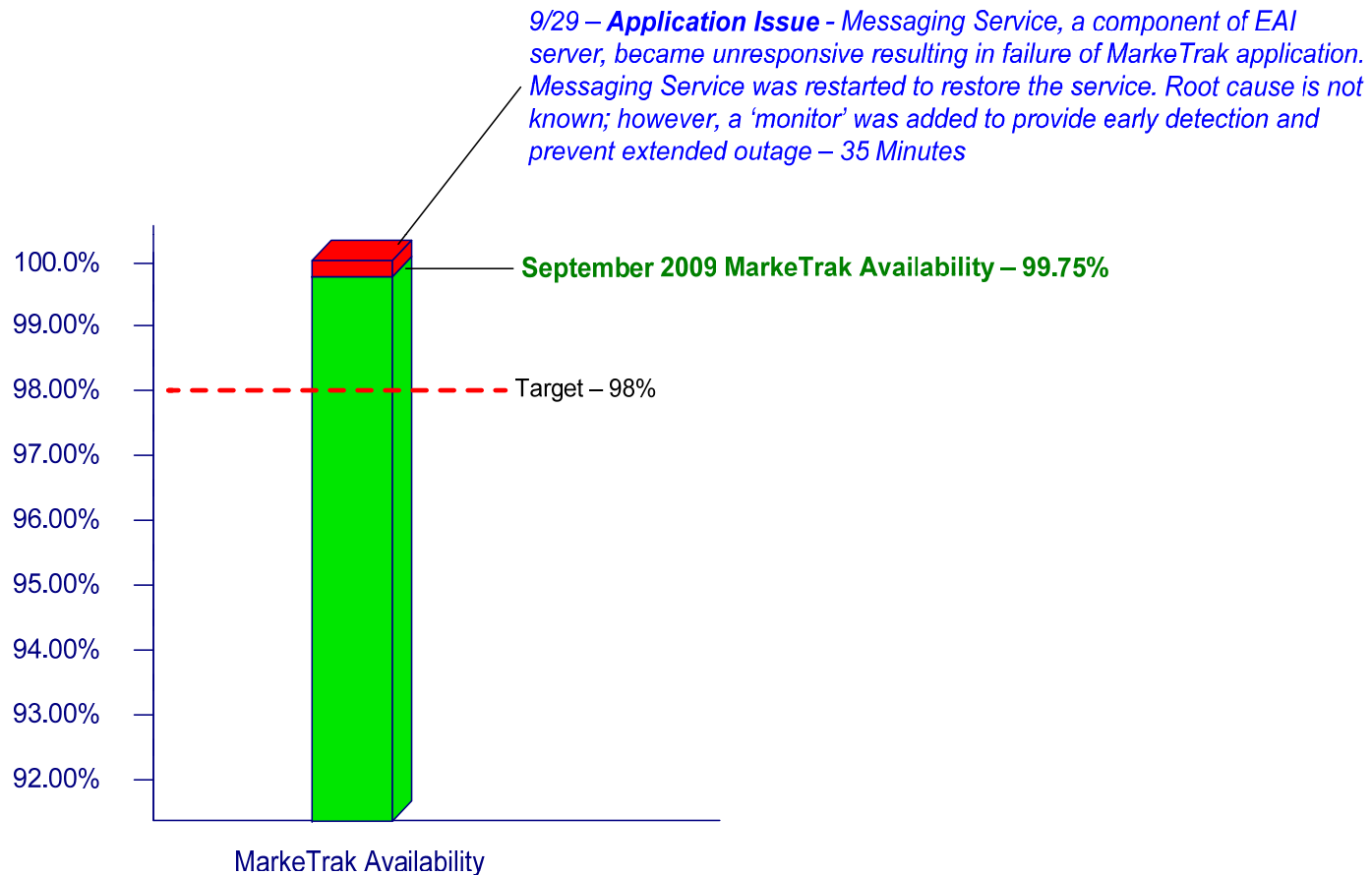
TML Availability Summary

September 2009 TML Availability Summary



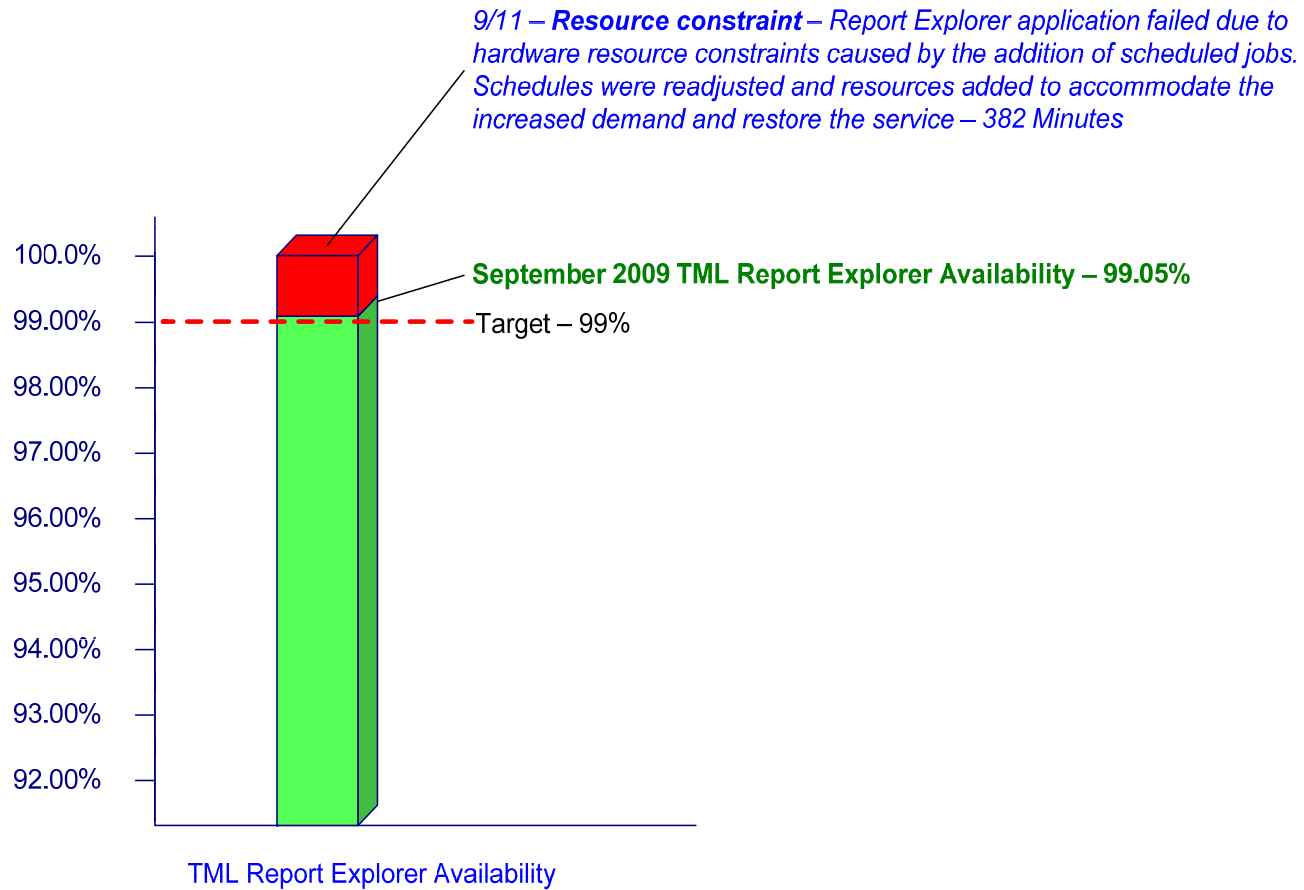
MarkeTrak Availability Summary

September 2009 MarkeTrak Availability Summary



TML Report Explorer Availability Summary

September 2009 TML Report Explorer Availability Summary

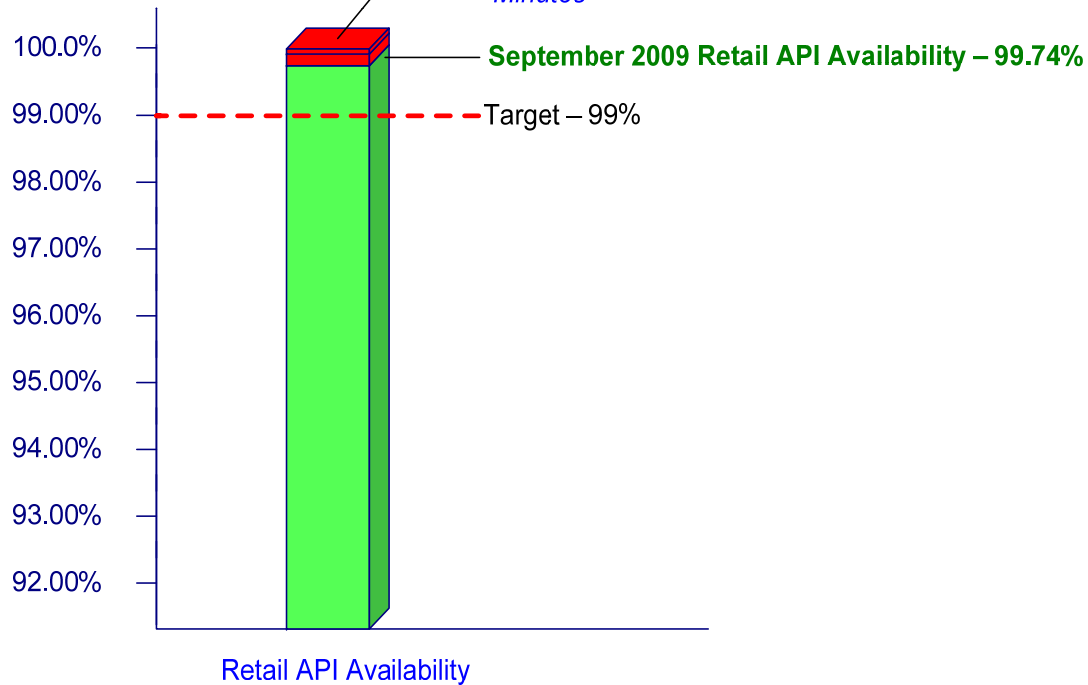


Retail API Availability Summary

September 2009 Retail API Availability Summary

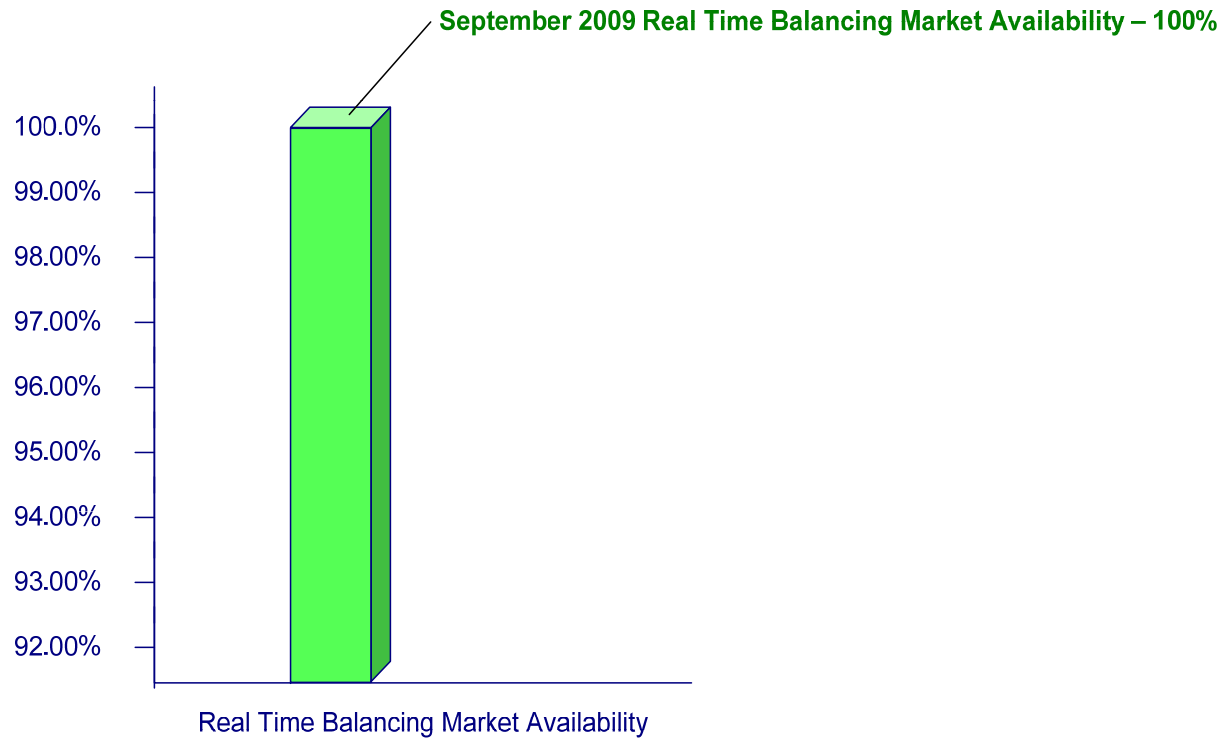
*9/29 – **Application Issue** - Messaging Service, a component of EAI server, became unresponsive resulting in outage of Retail API. Messaging Service was restarted to restore the service. Root cause is not known; however, a 'monitor' was added to provide early detection and prevent extended outage – 35 Minutes*

*9/2 – **Infrastructure Issue** – Enterprise Application Integration (EAI) server became unresponsive due to a hardware switch failure, resulting in outage of Retail API. Secondary switch device was activated to restore the service – 69 Minutes*



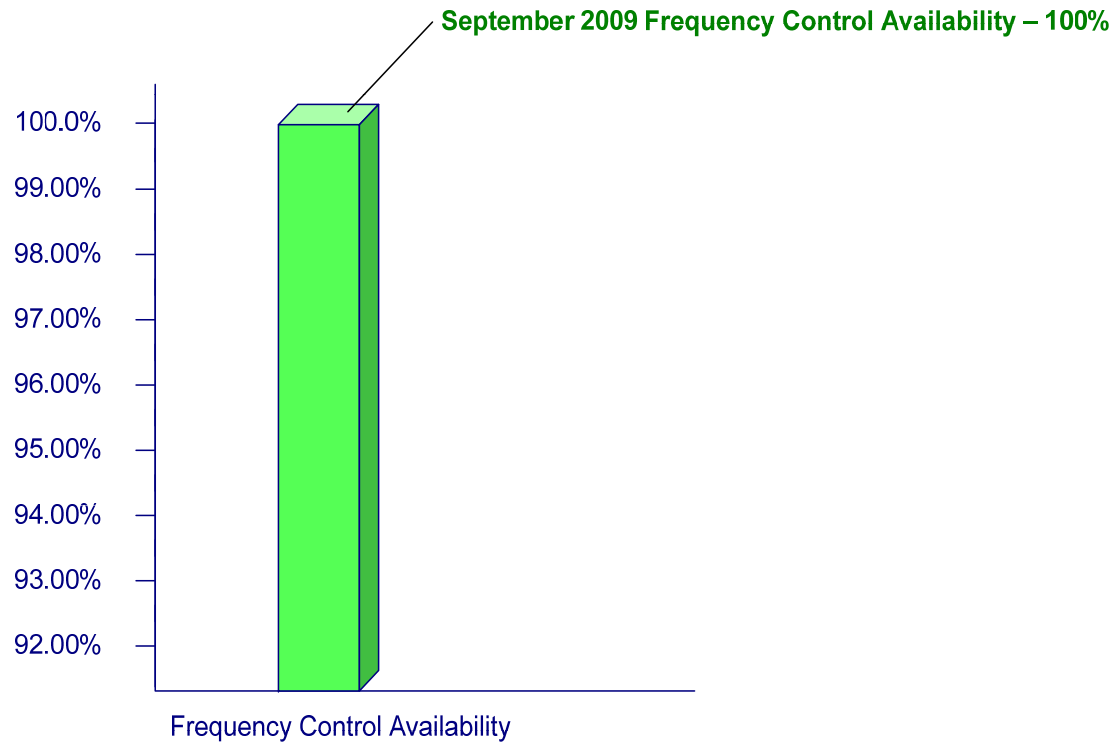
Real Time Balancing Market Availability Summary

September 2009 Real Time Balancing Market Availability Summary



Frequency Control Availability Summary

September 2009 Frequency Control Availability Summary



Metrics Guide – Nodal Early Delivery Systems

- **Aggregate Energy Management System (EMS)**
 - Measure of the availability of software that provides real time grid control capability. Calculated as average of deployed & monitored components availability
- **Outage Scheduler**
 - Measure of the availability of the software to manage the submission, modification, deletion of schedules for various types of transmission and generation systems' outages
- **Network Model Management System (NMMS)**
 - Measure of the availability of the software to manage the ERCOT network model. Calculated as availability of model management core engine (IMM)

Nodal EDS Environment – September 2009 Net Availability

September 2009 Net Availability - Grid Management Systems

