



Information Technology Service Availability Metrics

ERCOT Board of Directors
March 2009

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❖ Retail and Wholesale Systems Performance

- **Retail Transaction Processing** – February performance (99.54%) was below the service level target of 99.9%.
 - A database lock triggered by a manual query session resulted in a freeze or slowdown of EDI 867 and 814 transaction processing for 170 minutes. The lock was removed to resolve the problem. A S/W upgrade is being evaluated to address this weakness and prevent recurrence.
- **TML, TML Report Explorer, Retail API** – February performance was 99.5%. This was above the service level target of 99%.
- **MarkeTrak** – February performance was 99.69%. This was above the service level target of 98%.
- **Wholesale Total** – February performance was 100%.

❖ Market and Grid Control Systems Performance

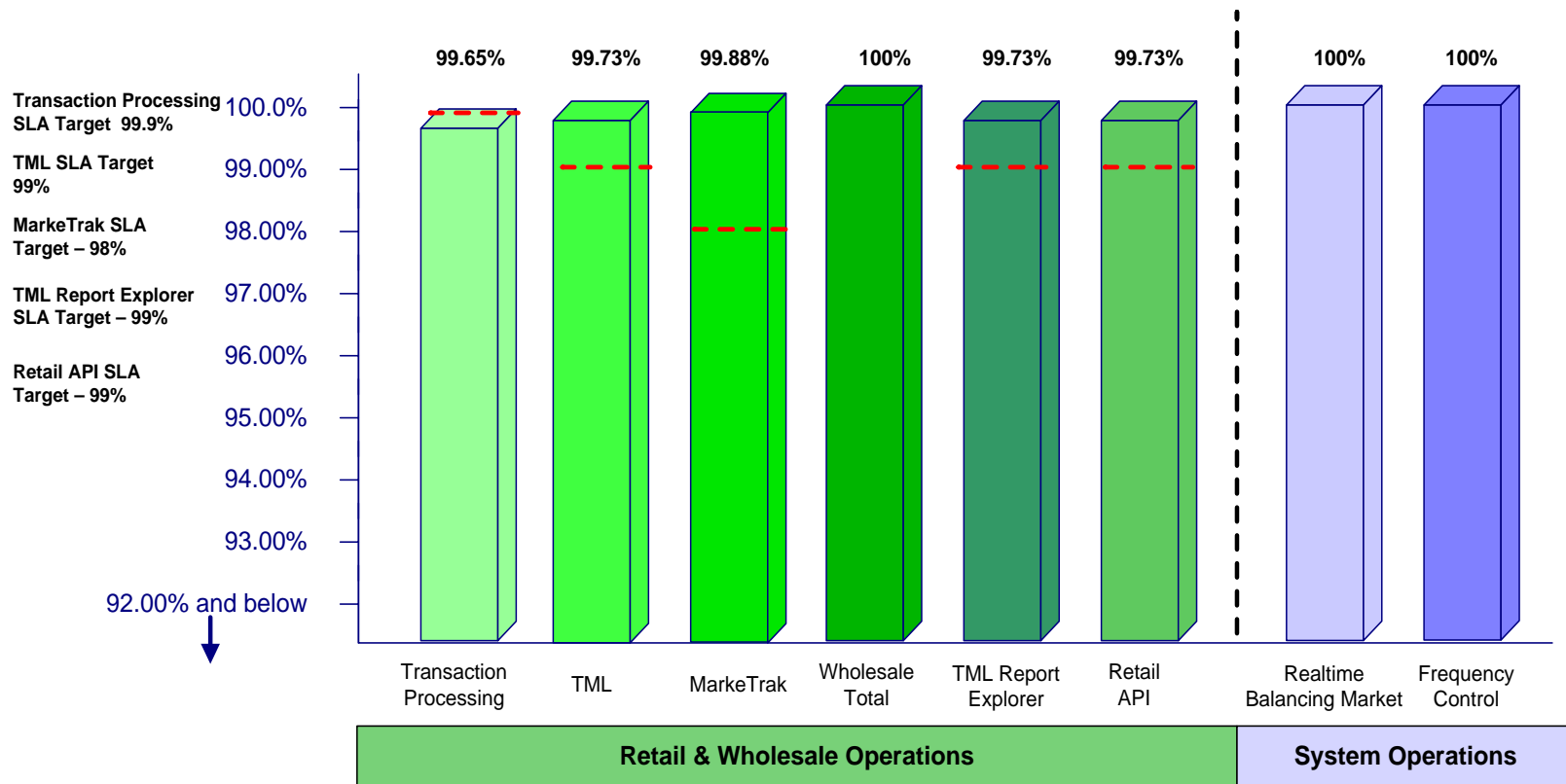
- **Real Time Balancing Market (RTBM), Frequency Control (FC)** – February performance was 100%.

❖ Nodal Systems Performance

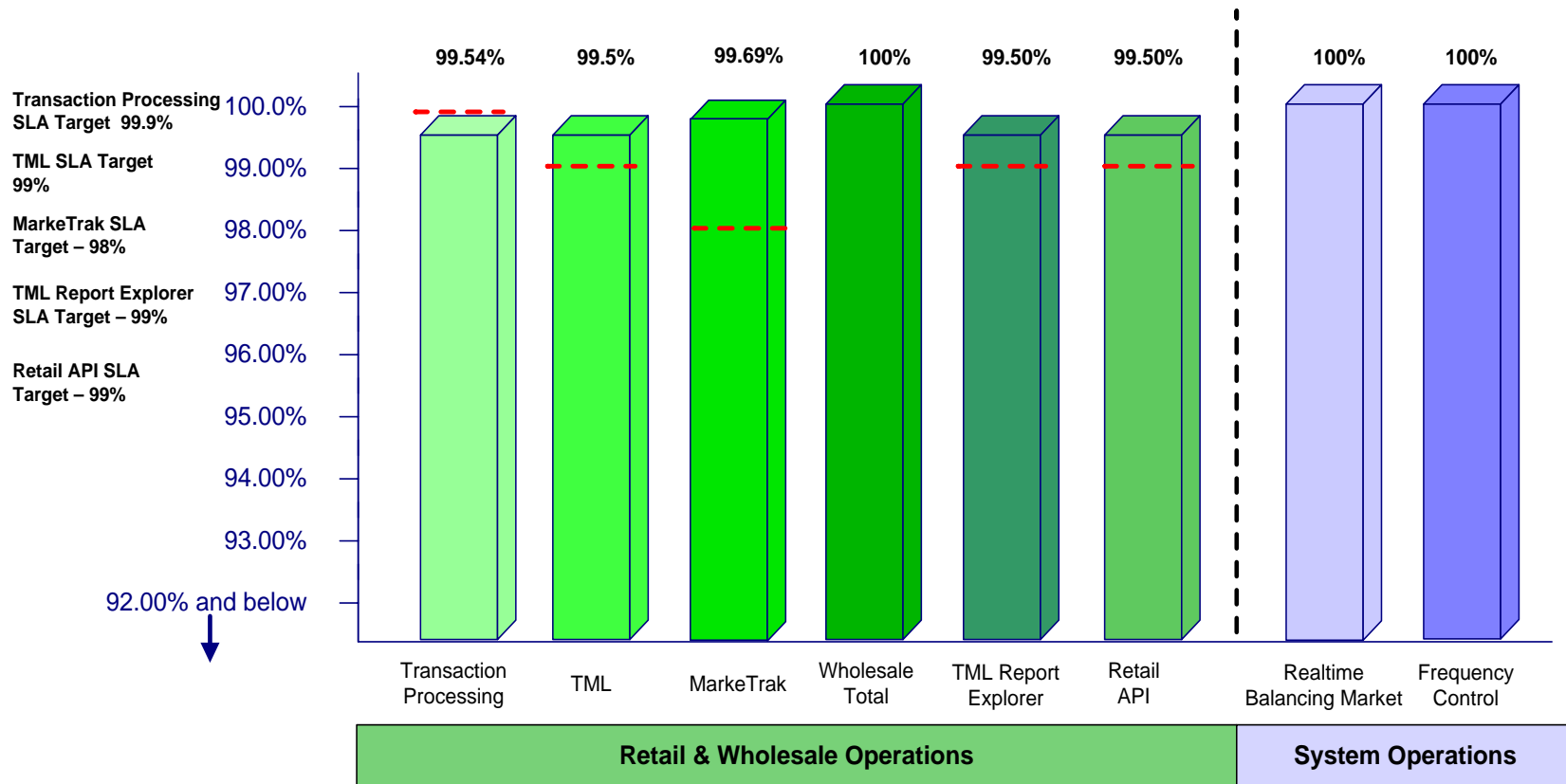
- **H/W Infrastructure, Grid and Market system** – H/W Infrastructure and Aggregate EMS performance levels exceeded service level targets in February. Aggregate MMS performance was 91.927%, which was below the target of 98%.
 - During Infrastructure upgrade effort, OS upgrades were applied to incorrect disks due to human error, resulting in lost D/B data and 3196 minutes failure of SCED application, a component of MMS. The data was recovered from backups to restore the application. Also procedures were reviewed and enhanced to prevent future occurrences.
- **MIS, Current Day Reports (CDR) and Financial Clearinghouse** – February performance levels exceeded service level targets.

2009 Net Service Availability

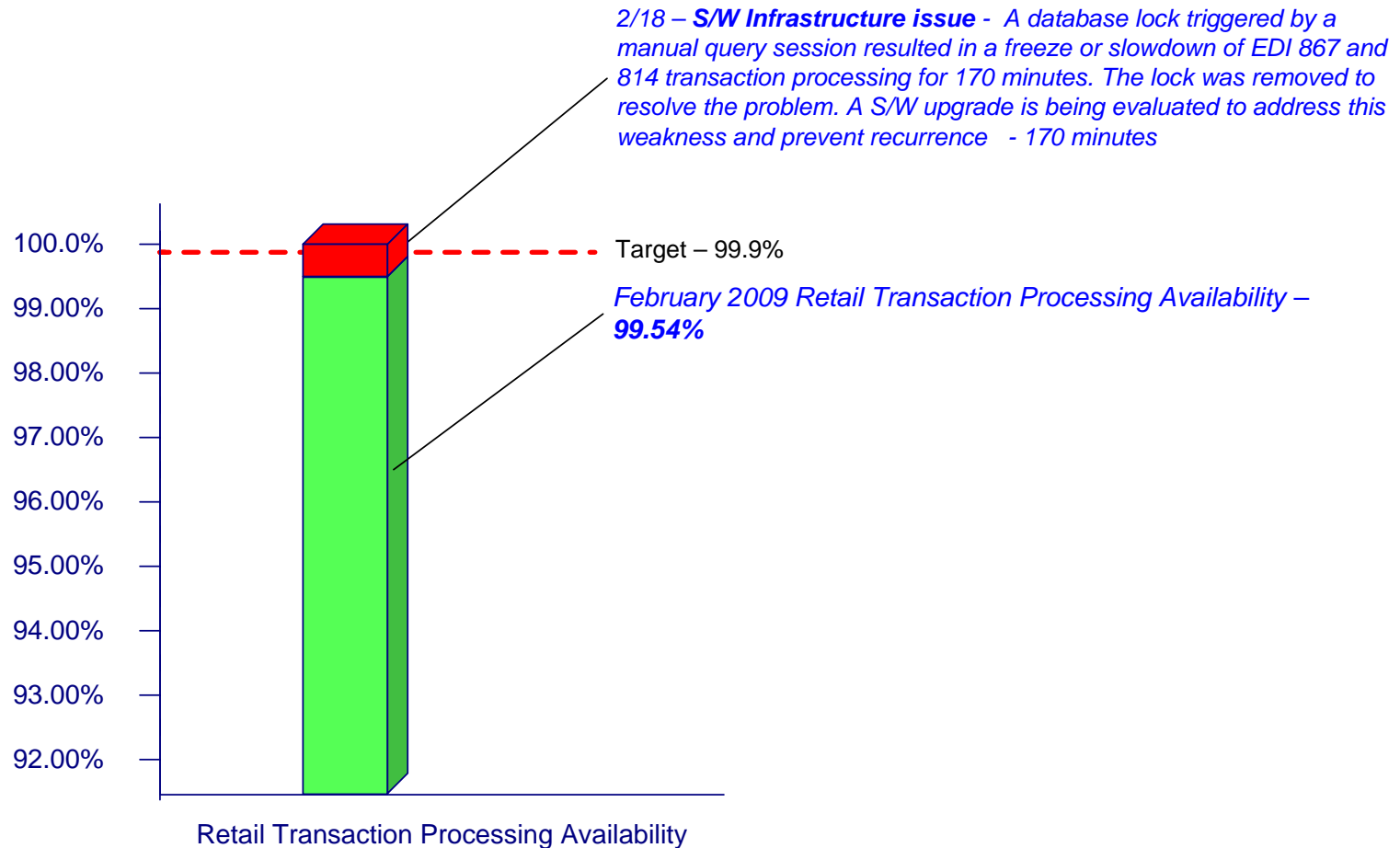
Through February 28th, 2009



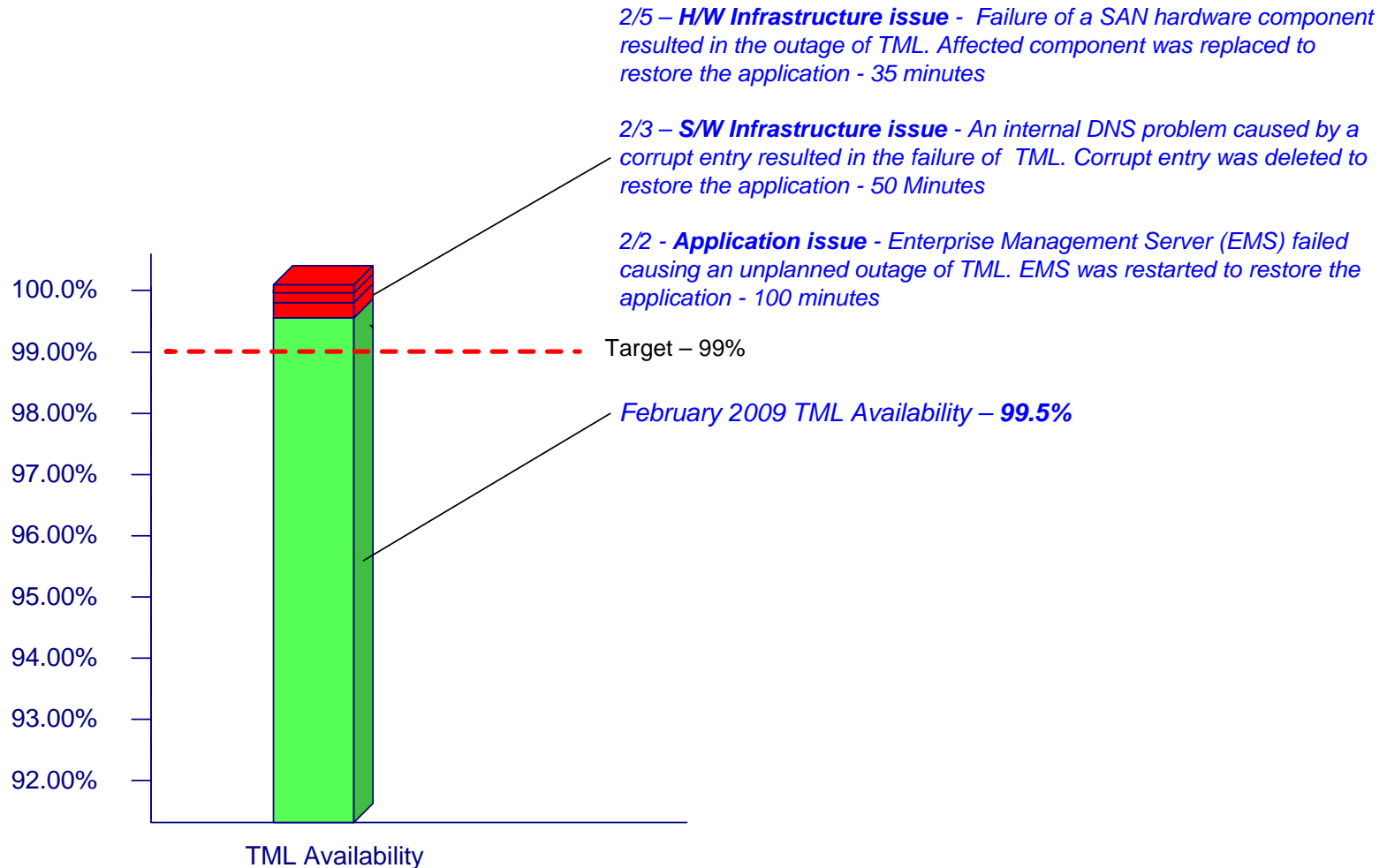
February 2009 Net Service Availability



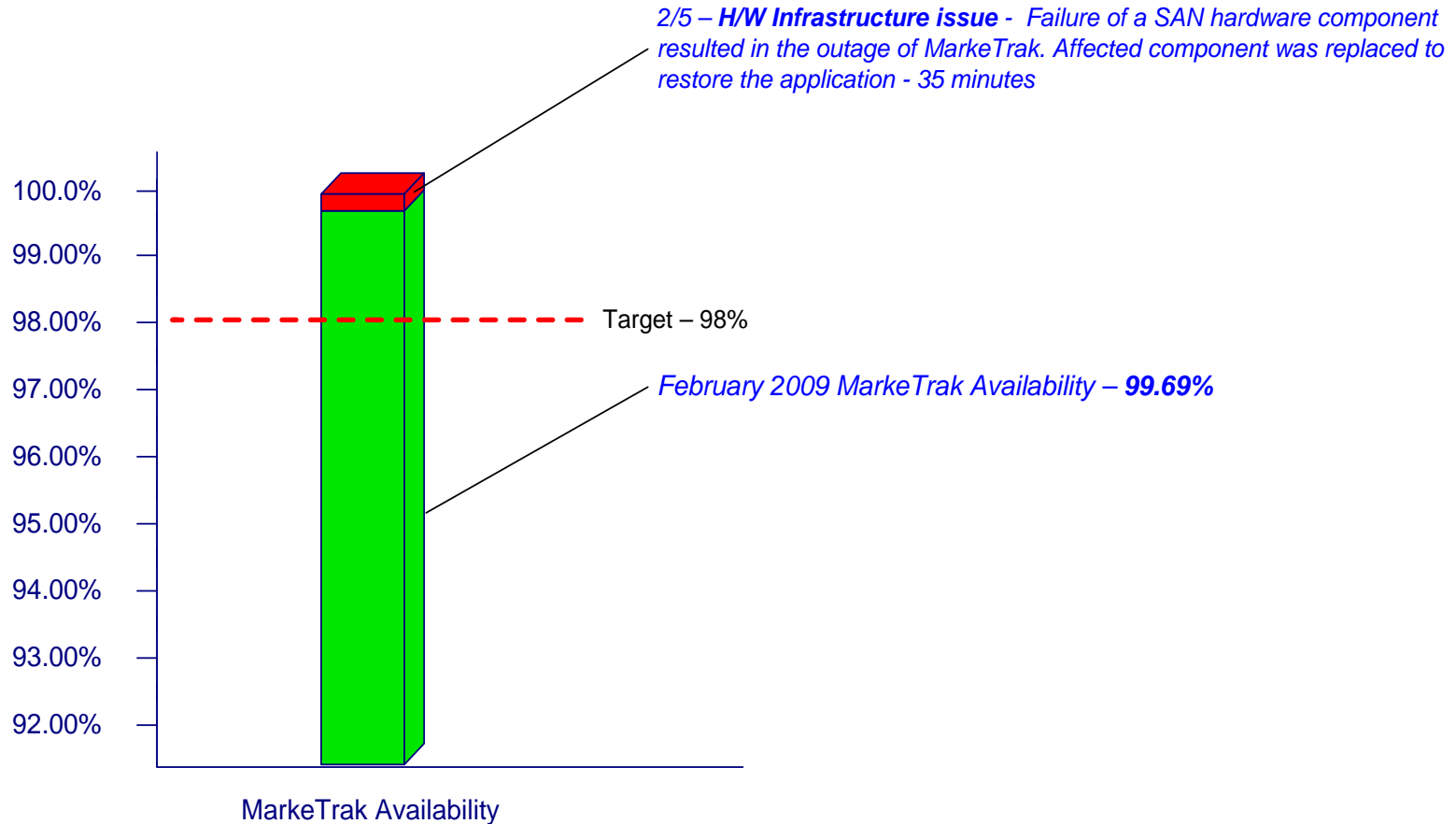
February 2009 Retail Transaction Processing Availability Summary



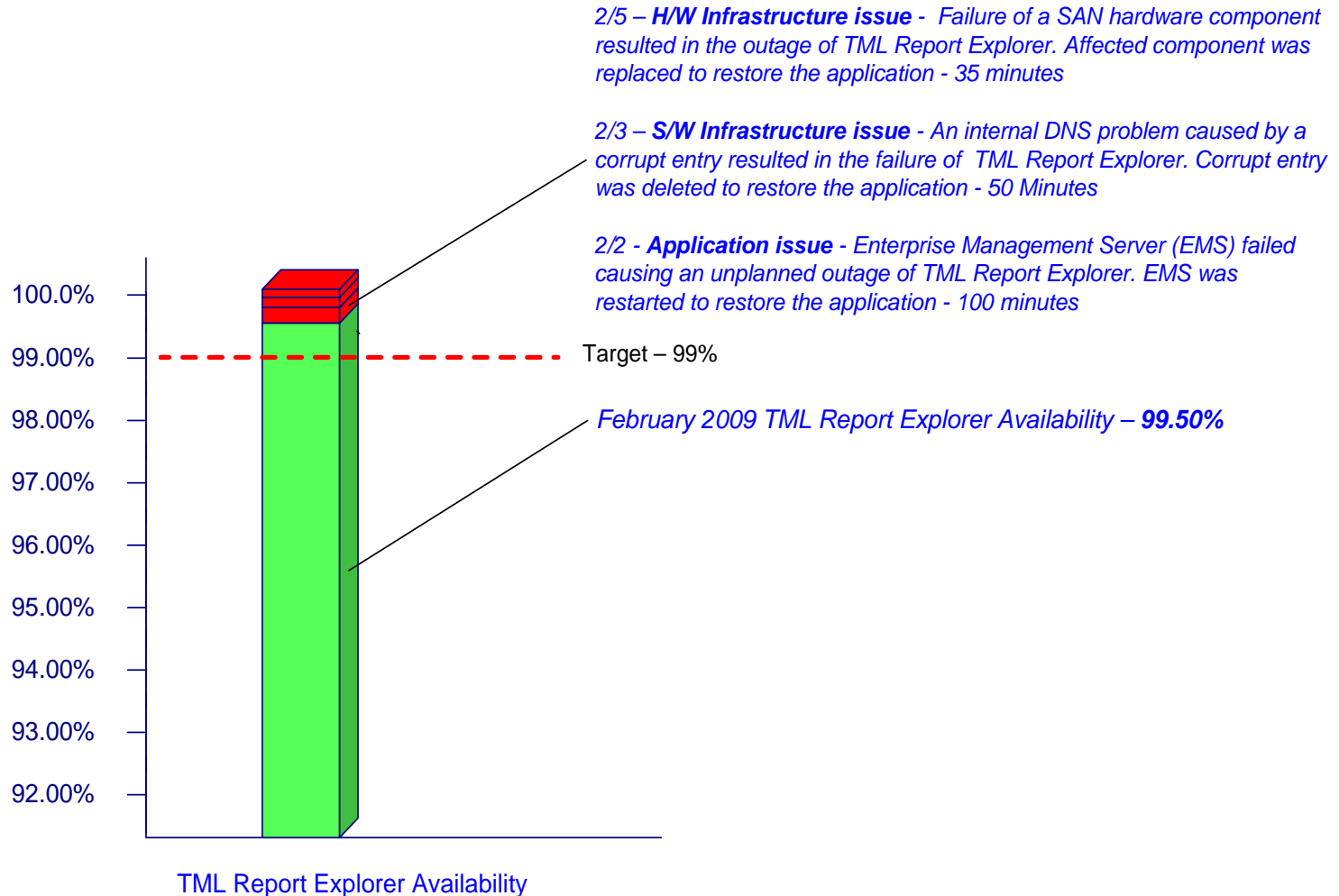
February 2009 TML Availability Summary



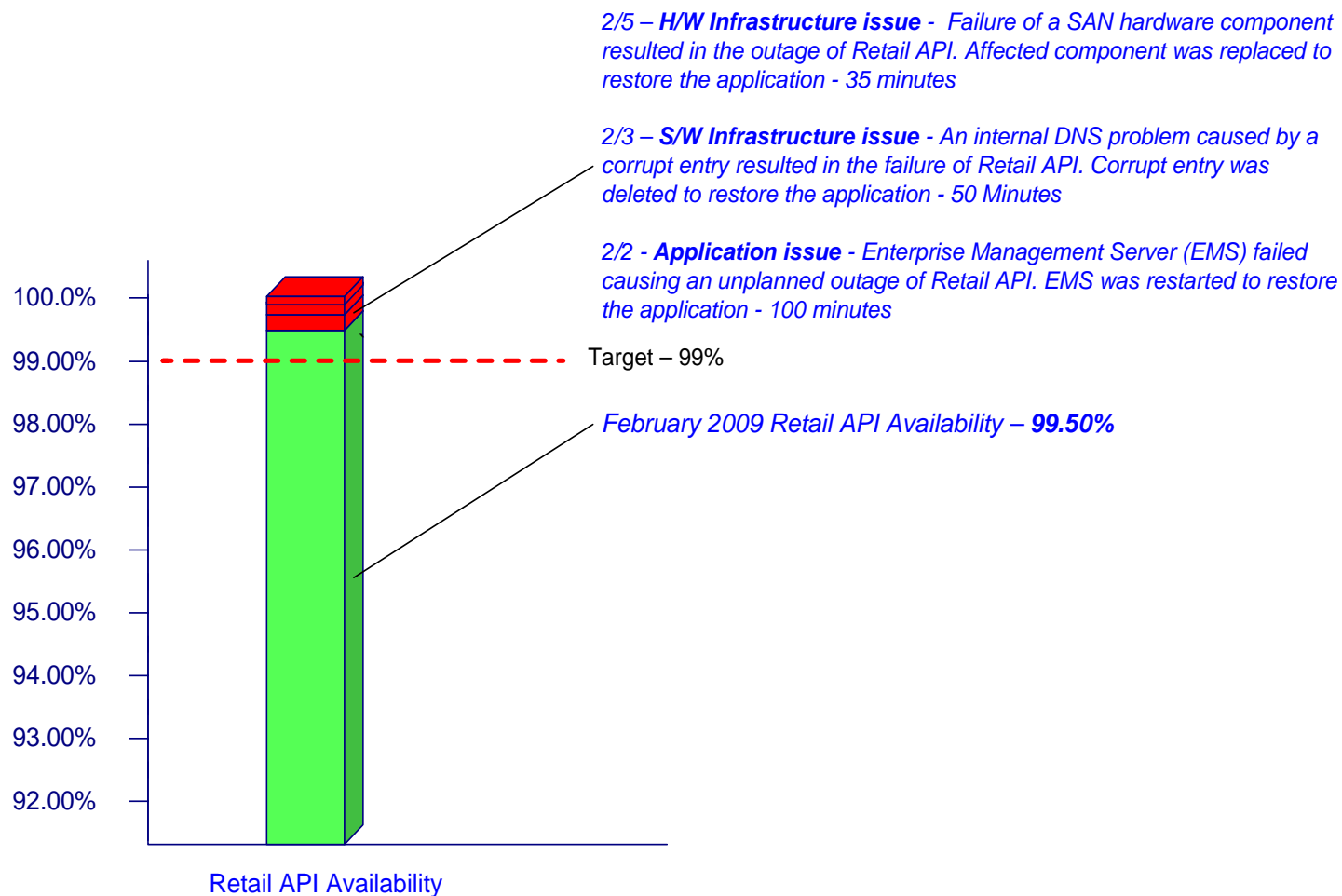
February 2009 MarkeTrak Availability Summary



February 2009 TML Report Explorer Availability Summary



February 2009 Retail API Availability Summary

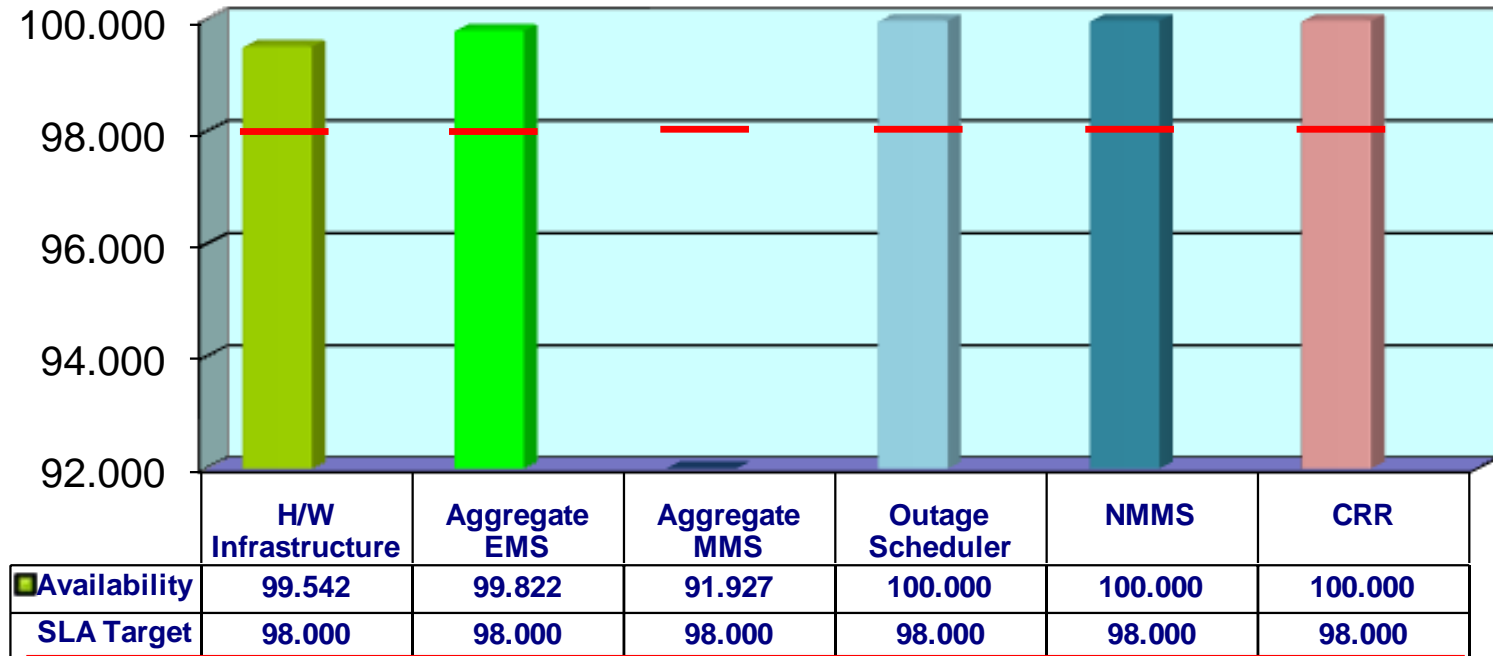


- **EDS Hardware Infrastructure**
 - Measure of the availability of the systems that compose the “Early Delivery Systems” where Nodal applications are deployed
- **Aggregate Energy Management System (EMS)**
 - Measure of the availability of software that provides real time grid control capability. Calculated as average of deployed & monitored components availability
- **Aggregate Market Management System (MMS)**
 - Measure of the availability of the software to economically deploy generation and manage day ahead, real time and ancillary services markets. 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)

- **Congestion Revenue Rights (CRR)**
 - Measure of the availability of software to manage the financial instruments that help Market Participants hedge against losses due to transmission constraints.
- **Aggregate Market Information System (MIS)**
 - Measure of the availability of software that provides web-based interfaces for Market Participants to interact with ERCOT markets. Calculated as average of deployed & monitored user-interface components availability
- **Current Day Reports (CDR)**
 - Measure of the availability of the software that allows Market Participants query and download reports related to grid and market operations in near real time
- **Settlements & Billing (S&B)**
 - Measure of the availability of the software to financially settle Market Participant transactions and generate statements and invoices
- **Credit Monitoring and Management (CMM)**
 - Measure of the availability of the software to determine credit exposure of Market Participants to the ERCOT markets and continually monitor their ability to meet the credit standards

Nodal EDS Environment – February 2009 Net Availability

February 2009 Net Availability - H/W Infrastructure, Grid and Market Management Systems



2/1 – 2/3: During an infrastructure upgrade effort, operating system upgrades were applied to incorrect disks due to human error, resulting in lost data and a 3,196 minute failure of the SCED application, a component of MMS. The data was recovered from backups to restore the application and to prevent future occurrences, procedures were reviewed and enhanced.

February 2009 Net Availability - MIS, Reporting and Financial Clearinghouse

