

Information Technology Service Availability Metrics

Richard Morgan
Vice President & CIO

ERCOT Board of Directors August 18, 2009

Agenda and Commentary

❖ Retail and Wholesale Systems Performance

- Retail Transaction Processing July performance was 99.95%. This was above the service level target of 99.9%
- TML, TML Report Explorer, Retail API July performance was 99.95%. This
 was above the service level target of 99%
- MarkeTrak July performance was 99.88%. This was above the service level target of 98%
- Wholesale Total July performance was 100%

❖ Market and Grid Control Systems Performance

- Real Time Balancing Market (RTBM), Frequency Control (FC) July performance levels were 99.966% and 100% respectively
 - A manual process associated with a routine Energy Management System (EMS) database load was not completed which resulted in several quick start resources not being recognized and available to the balancing energy market between 7/15 – 7/18.
 - An automated process replaced the manual process on August 12th.



Agenda and Commentary (continued)

Nodal Systems Performance

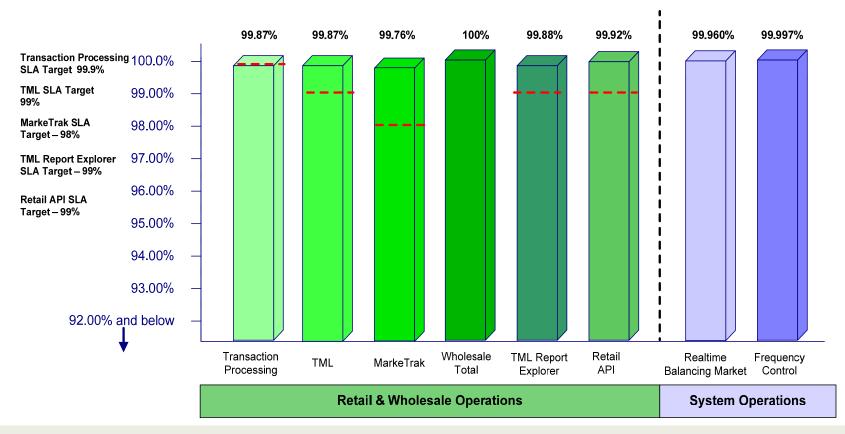
- H/W Infrastructure, Grid and Market system July performance levels exceeded service level targets
- MIS, Current Day Reports (CDR) and Financial Clearinghouse July performance levels exceeded service level targets



2009 Net Service Availability

2009 Net Service Availability

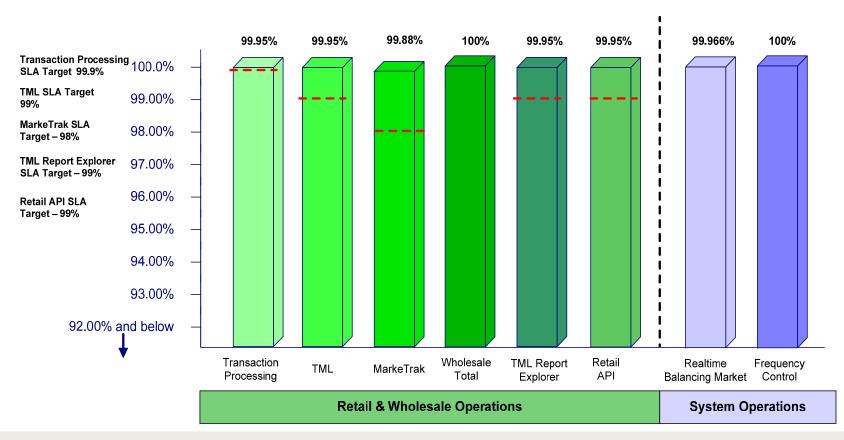
Through July 31st 2009





July 2009 Net Service Availability

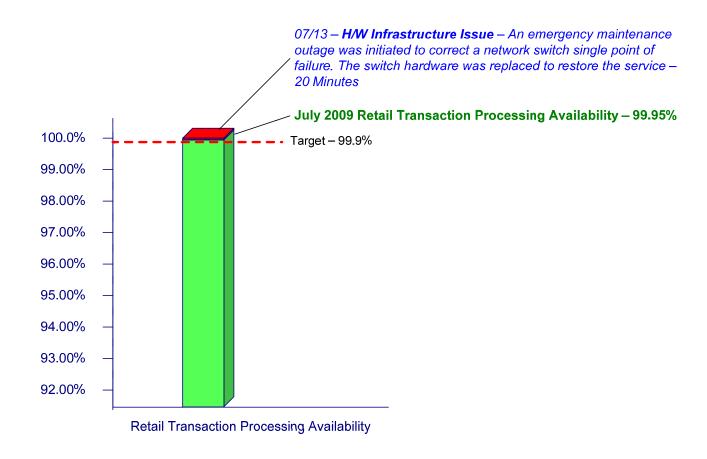
July 2009 Net Service Availability





Retail Transaction Processing Availability Summary

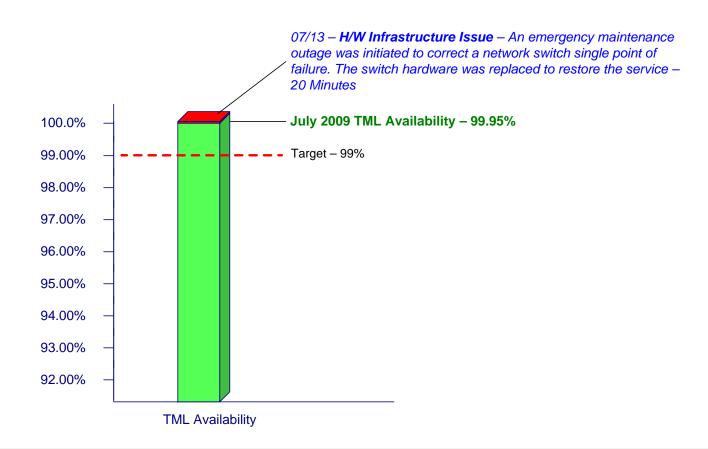
July 2009 Retail Transaction Processing Availability Summary





TML Availability Summary

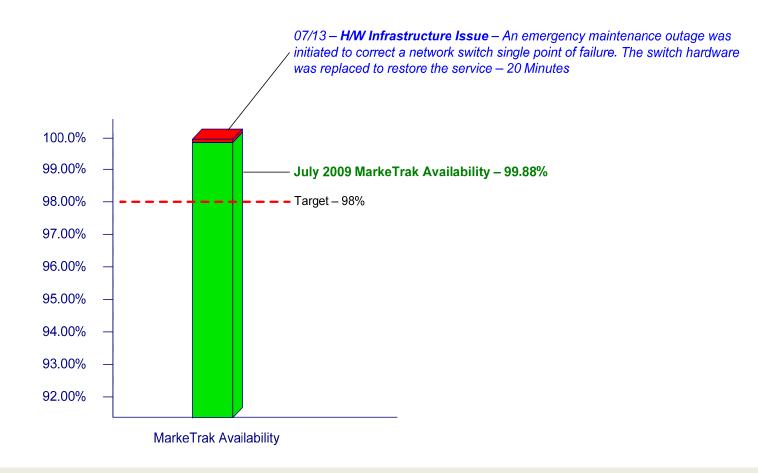
July 2009 TML Availability Summary





MarkeTrak Availability Summary

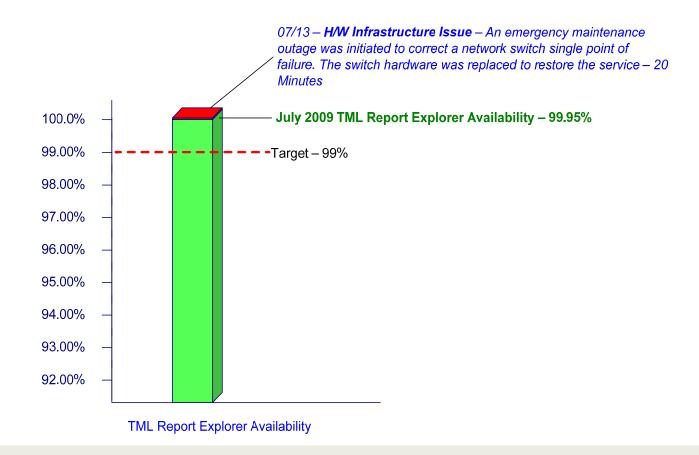
July 2009 MarkeTrak Availability Summary





TML Report Explorer Availability Summary

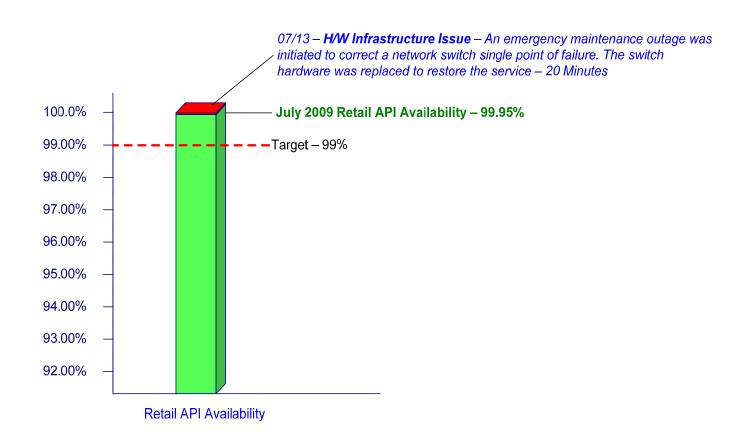
July 2009 TML Report Explorer Availability Summary





Retail API Availability Summary

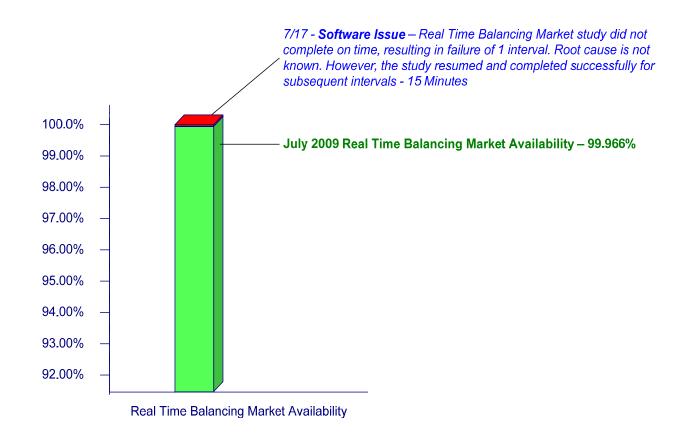
July 2009 Retail API Availability Summary





Real Time Balancing Market Availability Summary

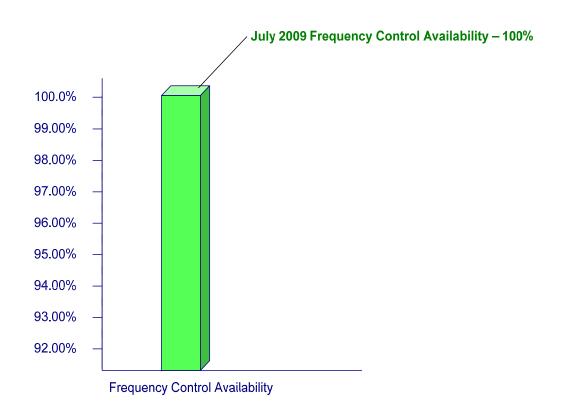
July 2009 Real Time Balancing Market Availability Summary





Frequency Control Availability Summary

July 2009 Frequency Control Availability Summary





Metrics Guide - Nodal Early Delivery Systems

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)



Metrics Guide - Nodal Early Delivery Systems (Contd.)

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)

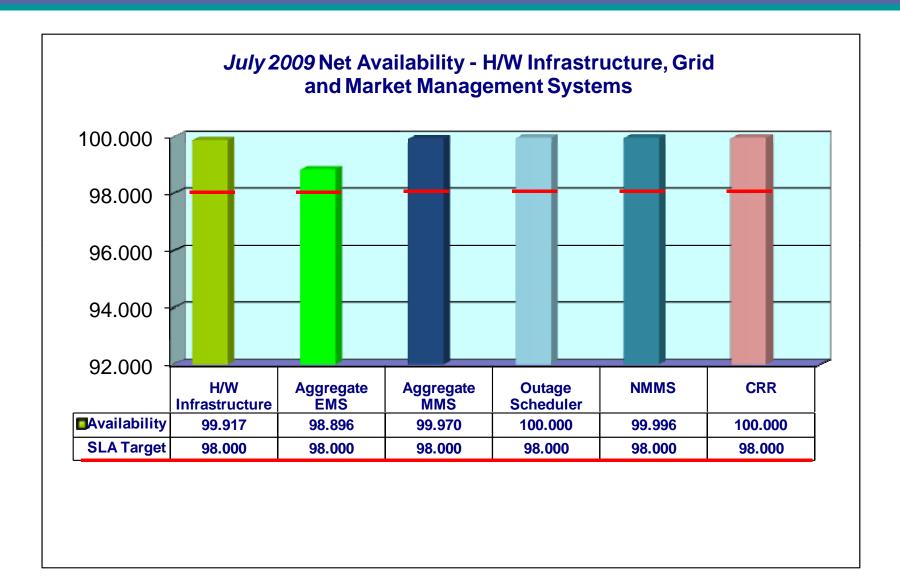
 Measure of the availability of the software to financially settle Market Participant transactions and generate statements and invoices

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 - July 2009 Net Availability





Nodal EDS Environment - July 2009 Net Availability (Contd.)

