NYISO IT Strategic Initiatives
Progress Update

Business Issues Committee Meeting
24 April 2001

Agenda

- *Review of the Initiative Development Process*

- *Review current and future IT architecture*

- *Review Migration Plan*

- *Discuss Immediate Deliverables*

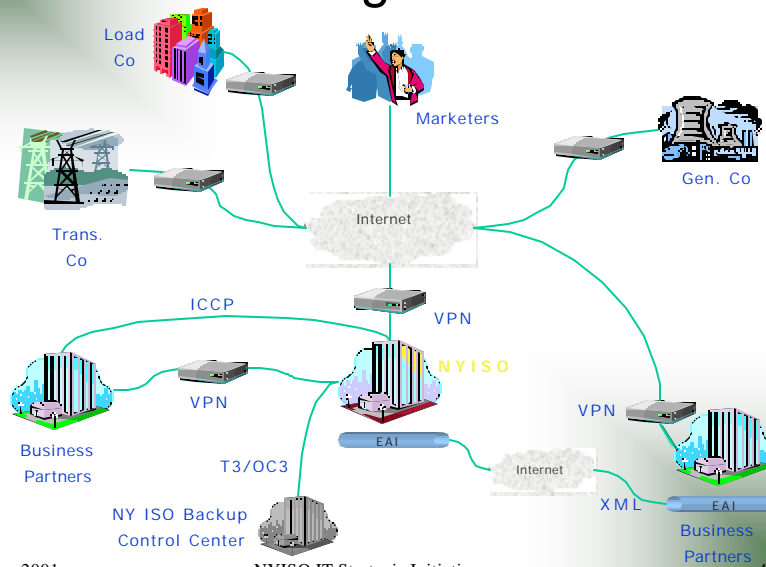- *Future Phases*

Overview of Initiative Development

✓ **Sapient and NYISO completed 5 week Enterprise Architecture Strategy in Q4 2000**

- *Developed the future technology solution for the NYISO & a migration plan*
- *Data Accessibility was deemed number one priority focus area*
- *Transform NYISO from a data provider to an information provider*

IT Strategic Vision

Slide 1

Current NYISO IT Architecture

Key
Low Risk | Med Risk | High Risk

Internet

Direct Customers
• LE
• Power Suppliers
• Power Exchanges
• TCC Holder

PC Application Server

TCG Creation
Load Forecaster
Maintenance Outage Scheduler

Market Place Web Servers (PC)

Billing (Oracle)

Billing Audit New Sys(Excel)

MIS System (OAS)

Market Monitoring (Unix/SAS)

MIS Oracle Forms

Transmission Providers

CNP

SDAC

EMS (Mainframe)

NYISO SCADA
Man Machine Interface
Load Trending
SCD
93 Day Audit
Outage Tracking
DFAX
Ramp Calc Pkg

Data Exchange

Data Exchange

SPIDER (Unix)

AGC
Gen. Perf. Tracking
SCUC
Non-Firm Txn
MDS
LBMP Calc.
BME

24Apr2001   NYISO IT Strategic Initiatives Progress Update   5

Slide 2

The Future NYISO

New
Replace
Existing

Wireless, XML, WWW

Internet

E-Marketplace

Internet   Firewall
NYISO LAN

Analysis Tools

Personalization

OLAP Server

Market Monitoring

Application Server

CMS

CRM

Messaging Service

Production Channel

Simulation Channel

EAI

Data Warehouse

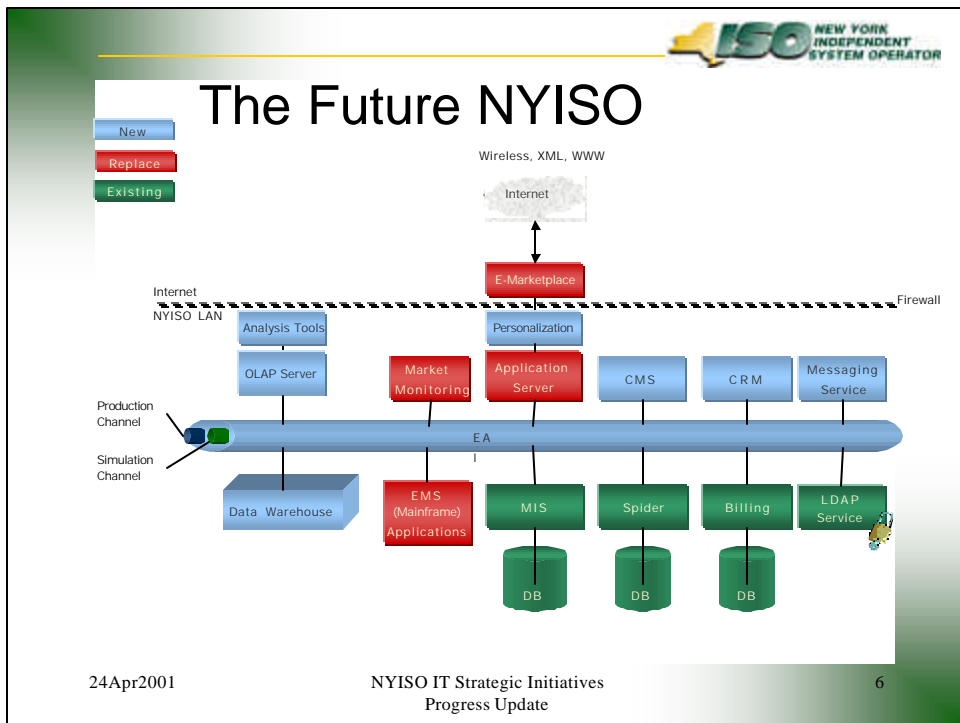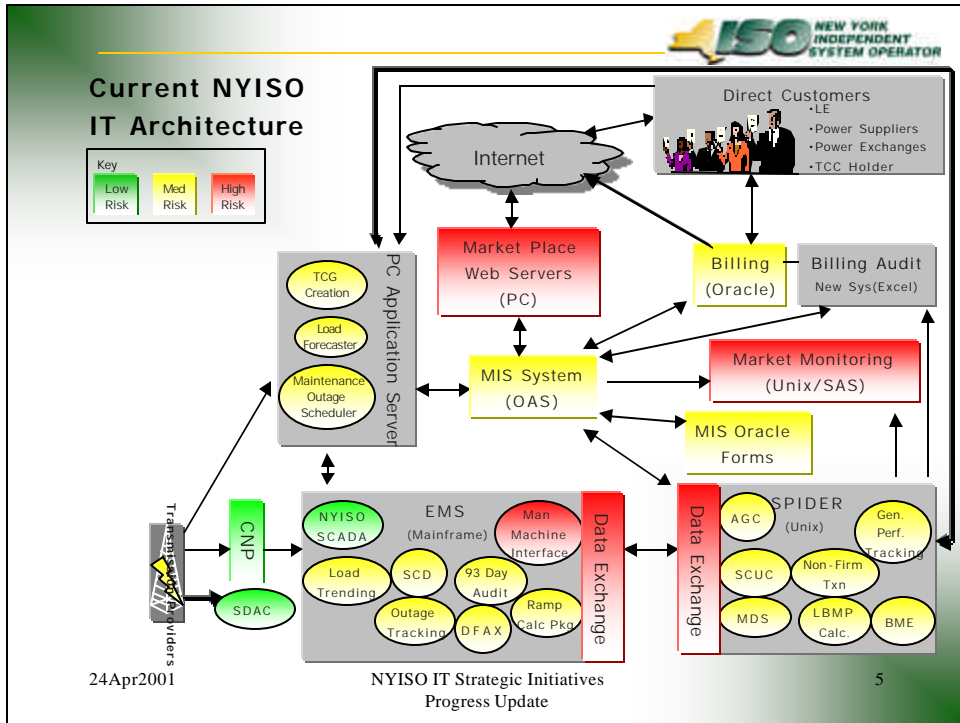EMS (Mainframe) Applications

MIS

Spider

Billing

LDAP Service

DB   DB   DB

24Apr2001   NYISO IT Strategic Initiatives Progress Update   6

Migration Plan

● **Phased Approach**

● **Website Refresh - 24April01**

● **Webserver Replacement, Billing & MMU Solutions and EAI Phase One Deliverables - 29May2001***

● **Pilot Data Mart available for limited testing - 2Q01**

● **All new applications should be EAI aware/enabled**

*- dependent on impact of Summer Initiatives

24Apr2001 NYISO IT Strategic Initiatives Progress Update 7

Immediate Deliverables

✓ **Second Quarter (currently unscheduled)**

- *PI Pilot Project*
  - Capture RT Telemetry, DAM / HAM / RT Prices
  - Ability to analyze PI data
  - Executive Summary Report
- *Webserver Replacements*
  - NetDynamics replaced with WebLogic

✓ **24 April**

- *Web Refresh*
  - Updated nyiso.com website
  - This is <u>not</u> the result of the Mar/Apr User interviews

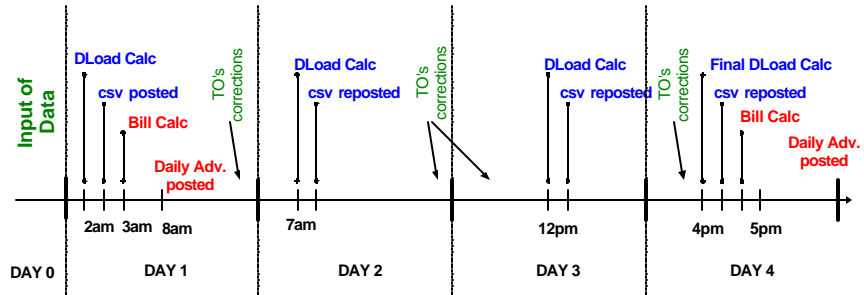24Apr2001 NYISO IT Strategic Initiatives Progress Update 8

Immediate Deliverables

✓ **29 May**

- *Billing Enhancements*
  - Pre-Billing - Enable MPs & NYISO Staff to see sub-zonal load inputs
    - Load data feed
    - Static data feed

Load Data CSV Feed

✓ **Data included in feed is**
- *Measurement description (name, PTID)*
- *Date & Time*
- *Hourly data automated and 5-minute data ad hoc*
- *MHRs to three decimal points*
- *Data source and quality*

✓ **Content based on type of MP**
- *LSE - view their loads at Load Bus level*
- *TO - view Load Bus level across an entire subzone, and their associated Tie Line and Gen unit data*
- *Generation Owners - view their associated Gen unit data*

4 Day Cycle for Load and Bill Calculation

Static Data CSV Feed

✓ Includes a breakdown of the subzonal definitions from the billing system:

- *Description of point (name & PTID)*
- *From and To Subzone identification*
- *Metering Authority identification*
- *TO associations*
- *Parties allowed to view*
- *Start, end and last updated dates*

Immediate Deliverables

✓ **29 May**

- *Billing Enhancements*
  - Post-Billing - Enhanced Advisory Billing Statements
    – Provide additional billing information requested by BAWG & BAWG Sub-groups
    – Provide application to convert new format to old

Daily Advisory Statement

✓ **Additional Data Available for MPs**

- *Power Suppliers Data*
  - OOM, LRR, PURPA, RPU flags and timestamps
- *Ancillary Services Data*
  - Emergency Curtailment info
  - Reserve Charge - Service Cost & LOC
- *TCC Data*
  - Losses $ and Congestion $
- *Transmission Provider Data*
  - Transaction size, source & sink

Immediate Deliverables
✓ **29 May**

- *Market Monitoring Reports*
  - SCUC scripts -   Automation of archived Day-Ahead commitment studies
  - SCUC Reports -   Numerous report to be used to analyze and compare Day-Ahead commitment studies
  - Financial Drill Down - Enable determination of root cause of financial aberrations
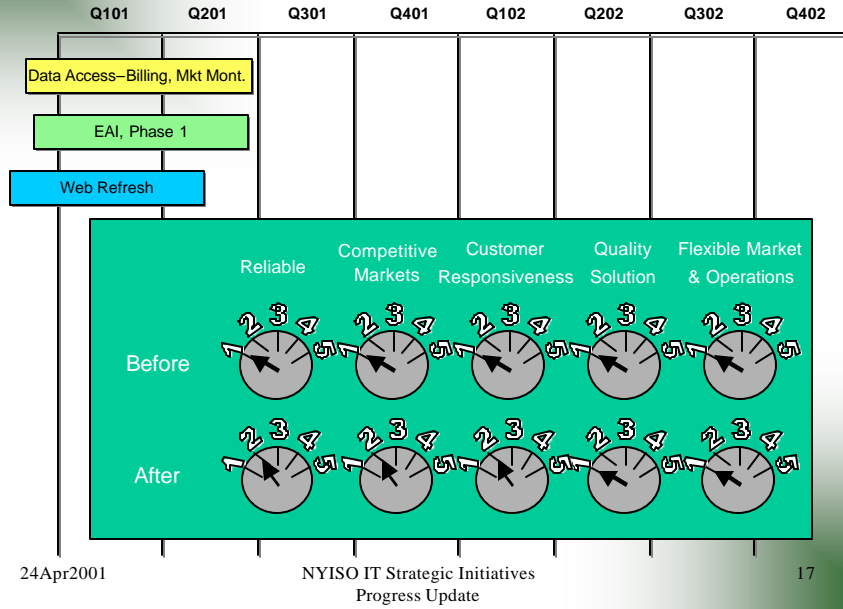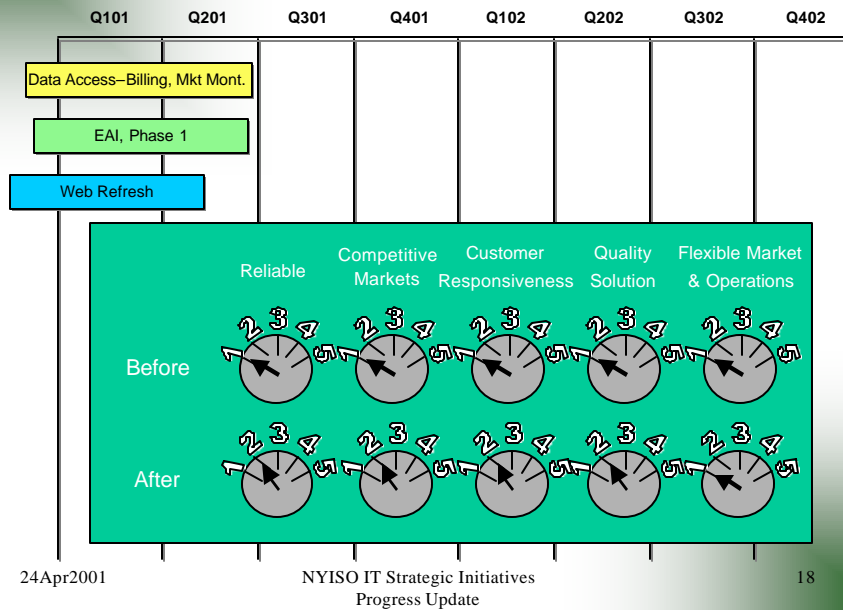
Immediate Deliverables
✓ **29 May**
- *Enterprise Application Integration*
  - Real Time Active constraints
  - Real Time Events - Automated posting of confirmed System States, Thunder Storm Alerts, Reserve Pickup notices
  - PAR flows & External Interface Limits and Flows

Business Metrics – Target for June 2001

Business Metrics – Actual for June 2001

Future Phases

- *Data Warehouse*
  - PI Pilot moved to production with additional data capturing as a DW feed
  - Development of Enterprise Data Warehouse
- *Replace Data Exchange between Mainframe Apps and Spider Apps with EAI*
- *Distribution of real-time power system model in CIM*
- *Real-time data for testing and simulation environments*
- *Inter-ISO messaging*
- *Pro-active messaging triggered by data trends*
- *Content Management System*

Questions??