



# SMD2 Readiness

**Business Issues Committee  
October 27, 2004**

Presented by  
**Richard Dewey**

# Overview

- **Deployment Scheduled for December 1**
- **SMD2 Readiness Requirements**
  - *Testing*
  - *Training*
  - *Departmental Readiness*
- **Deployment Planning**
- **MP Consultation Schedule**

# SMD2 Readiness Requirements

- **Satisfactory Assessment of Market Trials/Simulation and Test Scenarios**
- **Departmental Readiness in the Following Functional Areas:**
  - *Market Operations*
  - *Market Monitoring & Performance*
  - *Power System Operations*
  - *Customer Settlements*
- **Detailed Cutover and Fall-Back Plan**
- **LECG/Patton Assessment**
- **Consultation with MPs Prior to FERC Notification**
- **Final Signoff**

# SMD2 Testing Status

## ✦ Key Test Activities Completed

- *Factory Acceptance Testing*
- *Functional Testing*
- *Market Trial exercises*

## ✦ Key Test Activities Remaining

- *Review Market Trial 7 results*
  - *Resolve Open Issues*
- *Review MP test scenarios and results*
- *Complete business owner testing*
- *Complete integration testing*

# SMD2 Training Status

## ➤ Market Participant Training

- *221 Market Participants attended to date*
- *Additional settlements training scheduled for November*
  - November 1-2 and 8-9
  - SMD2 A&B Manual posted for review on October 22

## ➤ Ranger Training – Complete

## ➤ NYISO Staff Training – Complete

## ➤ Operator Training – On Schedule

# Departmental Readiness

## Market Operations

- ✓ **Testing - SCUC/ RTS**
  - ✓ *Unit Commitment*
  - ✓ *Network Security Analysis*
  - ✓ *SCUC Multi-Pass Operations*
  - ✓ *Automated Mitigation Procedures*
  - ✓ *Data Interfaces/Processing*
  - ✓ *Special Market Functions*
- ✓ **Procedures**
  - ✓ *DAM Administration Procedures*
  - ✓ *Network Model Maintenance Procedures*
- ✓ **Network Model Database Verification**
  - ✓ *Validation of legacy conversion to SMD*
  - ✓ *Operational review of SMD network model*
- ✓ **State Estimator Commissioning**
- ✓ **DAM/RTM Load Forecaster Operations**
- ✓ **Transmission Outage Reporting**
- ✓ **Special Operations Monitoring Programs**

# Departmental Readiness Market Monitoring & Performance

## ✓ Testing

- ✓ *Mitigation Functions*
- ✓ *Screening Tools*
- ✓ *SCUC/RTS Market Analysis  
(Study Mode, Save Case  
and Associated Tools)*
- ✓ *Price Corrections*

## ✓ Procedures

- ✓ *Market Analysis*
- ✓ *Price Validation*
- ✓ *Market Monitoring*
- ✓ *Mitigation*

## ✓ Training

- ✓ *Running SCUC/RTS*
- ✓ *Extracting data*

## ✓ Data Interfaces

- ✓ *Price Correction Data to and  
from LECG*
- ✓ *Reference Price Information  
to and from Potomac*
- ✓ *Data flow between MIS and  
MM&P Reports*

# Departmental Readiness Power System Operations

## ✓ Testing

- ✓ *Validate Program Results, such as Contingency Analysis, RTC/RTD/CAM functions, etc.*
- ✓ *Verify Applications: Metering/One-line, Displays, Big Board, Alarms*
- ✓ *Verify identified problems corrected*
- ✓ *Ensure overall system performance*

## ✓ Procedures

## ✓ Training

- ✓ *Bid-to-Dispatch Basepoints*
- ✓ *Interaction with MIS and Ranger*
- ✓ *Two Weeks Training on Simulator for each Operator*
- ✓ *Detailed Cut-Over Plan from Legacy to SMD2*



# Departmental Readiness

## Customer Settlements

### ✓ **Testing**

- ✓ *Over 100 Scenario Tests to ensure SMD2 Settlement Rule Logic is tested*
- ✓ *Testing to support Re-Design for Legacy settlements (e.g. Group Unit Logic changes)*
- ✓ *Market Applications: Consolidated Invoice, Cash & Transmission Service Reconciliations, Data Warehouse, Advisory Settlement Statements*

### ✓ **Procedures**

- ✓ *Audit Processes*

### ✓ **Training**

- ✓ *SMD2 and Legacy changes*

### ✓ **Audit Tool and Process Checks**

- ✓ *SMD2 and Legacy changes*

### ✓ **Accounting & Billing Manual**

# Deployment Plan / Activities

## ➤ **Designed to Minimize Market Impact**

- *Reduce market downtime*
- *Maximize opportunity for successful fall-back*

## ➤ **Parallel Bidding (Legacy and SMD2)**

- *Begins with Dispatch Day November 24 (DAM bids due HB 0500 November 23)*
- *Full MP participation is critical to ensure clean transition of MP data*
- *SMD2 bids should reflect realistic bids for settlement*
- *Provides opportunity for final stabilization*
- *Facilitates rapid fall-back (if required)*

## ➤ **Pre-deployment SMD2 Results Created During Parallel Operations Will Not be Posted**

# Deployment Plan Impacts

## ✦ Market Impacts/Outages

- *Short MIS outages for data prep/transfer*
  - Three - early November, prior to parallel operation, and November 30
  - Exact schedule/details to be announced

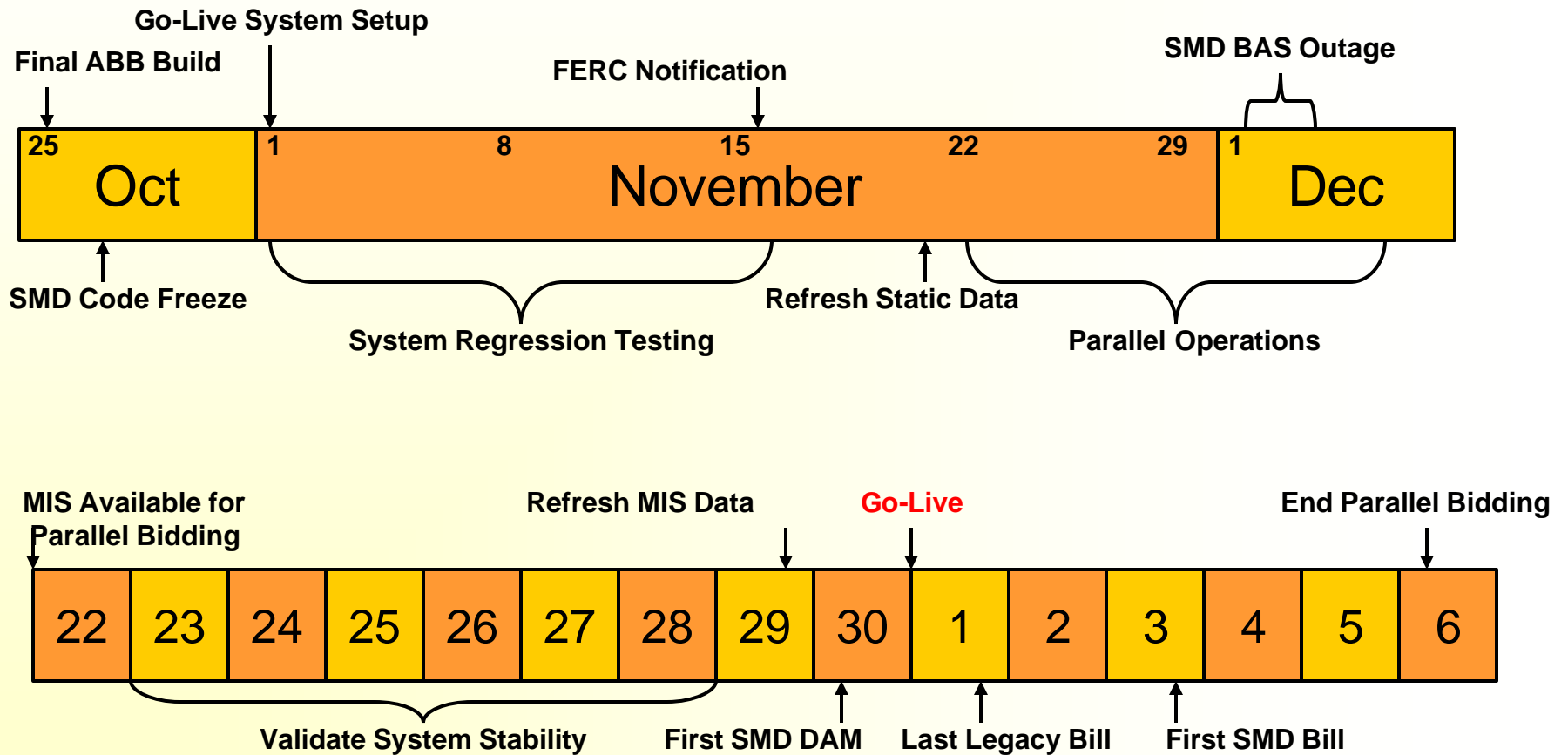
## ✦ Operational Impact

- *Short dispatch signal interruption at cut-over*

## ✦ Billing Outages

- *Longer outage for historical data translation*
- *Following posting of November 30 invoice*
- *First SMD2 invoice posted on December 3*
  - Specific schedule dependent on data conversion

# Deployment Timeline



# Fall-Back Plan/Activities

## ➤ Fall-Back Criteria

- *Operational control of the grid*
- *Markets supporting reliable system operation*
- *Production of customer settlement data*

## ➤ Fall-Back Steps Defined

- *Operation's EMS fall-back immediately*
- *Market requires outage, bid data translation*
- *Billing would require long outage, data backfill*
  - Interim settlement rules would require agreement

# Market Advisor Assessment

- ✦ **David Patton is specifically reviewing:**
  - *GT commitment/de-commitment performance*
  - *Reserve and Regulation Demand Curve activation*
  - *Market mitigation*
    - ~ 35 individual mitigation testing scenarios

# Consultation with MPs prior to FERC Notification

- **Sector Meetings**
- **BIC/OC Meetings**
- **MC Meetings**
- **Weekly Teleconferences**
- **FERC Notification Requirements**
  - *Two-week notification of intent to “go live” (November 16)*
  - *Forty-eight hour posting of effective date (November 27)*

# Meeting Timeline to Go-Live

|                      |   |   |
|----------------------|---|---|
| Oct 27/28            | BIC/OC Meeting  | SMD2 Readiness Review   |
| Oct 29 <sup>th</sup> | MSWG Telecon<br>9:30am-11:30am  | LECG Market Trial 7 Analysis, Open Issues List, MP Test Scenarios   |
| Nov 4 <sup>th</sup>  | MSWG Meeting  | Follow-up/Additional discussion on MSWG SMD2 Topics   |
| Nov 4 <sup>th</sup>  | CDAS Telecon<br>2:00pm to 4:00pm  | Detail review of SMD2 Cut over - Fall Back plan   |
| Nov 10 <sup>th</sup> | MC Meeting  | SMD2 Readiness Review, Market Advisors Assessment, Consultation with MPs on FERC initial Go-Live Notification |
| Nov 16 <sup>th</sup> | FERC Notification of intent to go-live  |   |
| Nov 17/18            | BIC/OC Meeting  | SMD2 Readiness Review   |
| Nov 19 <sup>th</sup> | SMD2 Tech Conference  | MP Technical Staff Conference on go-live logistics  |
| Nov 22 <sup>nd</sup> | MSWG Telecon<br>1:00pm - 3:00pm   | Follow-up/Additional discussion on MSWG SMD2 Topics   |
| Nov 26 <sup>th</sup> | SMD2 Telecon<br>3:00pm – 4:00pm   | MP Final Consultation on go-live  |
| Nov 27 <sup>th</sup> | NYISO Forty-eight hour posting of effective date (go-live date)                           |   |
| Dec 1 <sup>st</sup>  | SMD2 Go-Live (Day-Ahead bids submitted for Dec 1 <sup>st</sup> on Nov. 30 <sup>th</sup> ) |   |
| Dec 2 <sup>nd</sup>  | MC Meeting  | SMD2 Day After Go-Live Update   |
| Dec 3 <sup>d</sup>   | MSWG Telecon<br>1:00pm - 3:00pm   | SMD2 post-deployment consultation with MPs  |