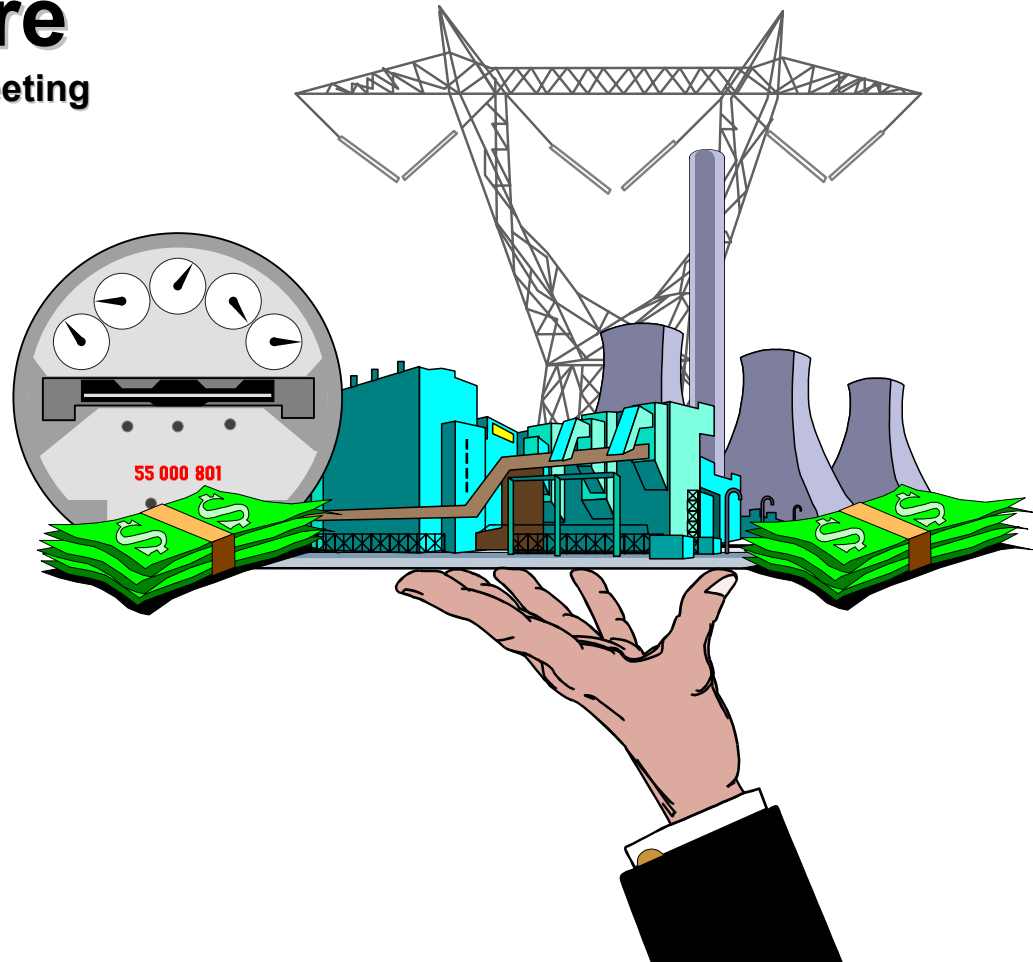


Settlements Department Operations & Process Controls Structure

Billing & Accounting Working Group Meeting

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Key Points

- ✓ Settlements' Role Is To Administer Effective Process Controls, Providing Reasonable Assurance That Settlements Are Reported Accurately & Completely
- ✓ Manager Of Settlements Required To Attest To The Administration Of Stated Controls For Senior Mgt's Quarterly SarBox Disclosure

Settlements' Controls Focus Upon 3 Main Areas

➤ Data Integrity

- Market Settlements Are Extremely Derivative
- Single Data Point Impacts Multiple Settlements
- Data Quality Varies For Data Used In Settling Balancing Markets

➤ Settlement Business Rule Integrity

- Market Settlements Are Extremely Derivative
- Single Settlement Error Propagates Through Multiple Settlements

➤ Processing Integrity

- Settlements Process Encompasses Virtually Every NYISO Process
- Most Processes Linked By Hardware & Hardware WILL Eventually Fail
- Many Processes Are Implemented Manually, Introducing Human Error
- Introducing The Human Element Requires Measures To Prevent Fraud

Controls On Data

- **Data Screening Performed On Each Day's Settlement Inputs**
 - Processes Are Formally Documented
 - Screening Processes Are Mechanized
 - Performance Tracking System [PTS] / Dispatch Interval Data
 - Incorporates A Number Of Self Checks
 - Post-SMD Process Provides For Automated Recovery & Recalc Of Data
 - Applies Reasonability Tests To Identify Anomalous Values & Statuses
 - Hourly Metering Data
 - Mechanized Comparisons Of Tie & Gen Hourly Billing Quality Data To Integrated Instantaneous
 - Meter Authorities Provided Comparisons To Assist In Identifying Any Warranted Corrections
 - MPs Have Web-Enabled Visibility Of Settlement & Determinant Data
- **Data Corrections Are Made Daily Per Screening Observations**
 - Processes Are Formally Documented
 - PTS Data Corrections
 - Applies Laws Of Physics When Performance Data Requires Estimation
 - Applies Market Rules When Scheduling Data Requires Estimation
 - Hourly Metered MWh Data Corrections Only Performed By Meter Authorities
- **Data Entry & Data Corrections Are Reviewed**
 - Processes Are Formally Documented
 - Reviewed By Staff Other Than Those That Entered The Data

Controls On Settlement Business Rules

- **Shadow Settlements Performed On Each Day's Settlements**
 - Process Is Formally Documented
 - Process Is Mechanized, Eliminating Sampling Error
 - Each Settlement Rule Replicated Within Discrete SAS-Based Recalcs
 - Each Day's Settlements Recalc'd & Compared To Billing System Results
 - All Observed Variances Documented, Reviewed, Reconciled, & Resolved
 - Also Tests Completeness By Ensuring All The Right Inputs Got Used
 - Ensures Code Hasn't Been Deployed Outside Change Control Guidelines
- **Reasonability Analyses Performed On Each Day's Settlements**
 - Process Is Formally Documented
 - Daily Market Balances Compared To 7-,5-, & 3-Day Rolling Trends
 - Operations Impact Analyses Performed
 - Designed To Identify Conditions That May Have Resulted In Anomalous Settlements Or Explain Drivers Behind Divergence From Trends, Such As Excessive Residuals Or Uplift
 - Senior Dispatcher's Log Reviewed To Identify Transmission Grid Operations That May Impact Settlements & Explain Any Divergence From Trend, Such As TLRs & OOMs
- **Settlements Staff Are Integral Part Of Market Development Efforts**
 - Settlements' Organizational Structure Dedicates Staff To Research, Development, And Pre-Deployment Testing Activities

Controls On Daily Processing

- Operations Impact Analyses Performed On Each Day
 - Senior Dispatcher's Log Reviewed To Identify Transmission Grid Operations That May Impact Settlements, Prompting Verification Of Accurate Flagging Of Those Conditions Within The MIS [e.g. OOM, Bilateral Curtailments, etc.]
 - Computer Operator's Log Reviewed To Identify Communications Or Computer Processing Failures That May Impact Settlement Processing
 - Computer Processing & Network Error Logs Reviewed To Identify Subtle Systems Failures That May Have Gone Undetected
- Shadow Settlements Performed On Each Day's Settlements
 - Each Day's Settlements Recalc'd & Compared To Billing System Results
 - Comparison Also Ensures That Reporting Mechanisms Operating Properly
 - Proving The Right Inputs Used Demonstrates Integrity Of Data Transfers

Controls On Monthly Processing

- Monthly Invoice-level Adjustments Process
 - Process Is Formally Documented
 - Control Form Used To Request That An Adjustment Be Made
 - Requires Requesting Party To Attest To Authority To Make The Adjustment
 - Requires Requesting Party To Describe Methodology Used To Derive & Provide Support
 - Entry Reviewed By Staff Other Than Those That Enter The Adjustment
 - Reviews Indicated By Sign-off
- Invoice Level Settlements, Adjustments, & Clearing Account Cash Flows Reviewed Prior To Monthly Invoice Issuance
 - Process Is Formally Documented
 - Settlements Compiles A Month-End Cash Flow Report Detailing Clearing Account Cash Flows For Each Month Contained In The Consolidated Invoice
 - Inclusive Of Explanations Of Settlement Variability, Residuals & Uplift Drivers, Budget Recovery, Voltage Support Service Cost Recovery, & Invoice-level Adjustments
 - Report Is Reviewed By Controller, Corporate Credit Manager, & Manager Of Settlements, Prior To Issuance Of Monthly Invoices