Integrated Data Management for Utility DSM and Renewable Programs

30th Utility Energy Forum

May 6, 2010

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Issues Faced by Utilities
- Lack of Timely and Consistent Data
- Data Collection Time Consuming and Frustrating
- Program Tracking is Hit or Miss
- Hard to Generate Repeatable Reports with Clear Audit Trail
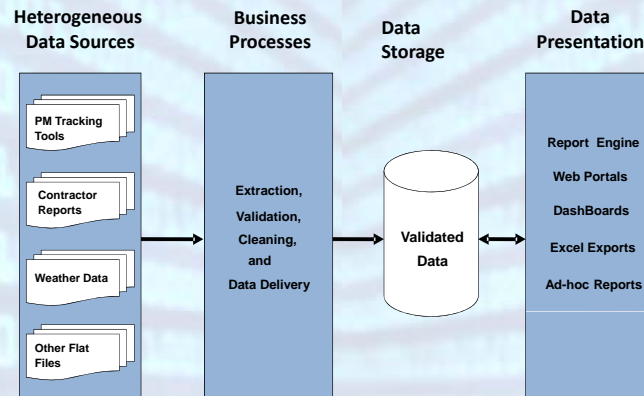- Long Time Lag for Verifiable Results

Utility Program Data
- Transactions [Customer, Premises, Measures, Rebates]
- Financial [Budgets, Program Expenses]
- Analytical [NTG, Current and Future kW Savings, M&V, Performance]
- Reports [Portfolio to Program Performance, Dashboards, Management, Tracking, Regulatory]
- Implementation Contractor Submitted
- Others: MIS Data, Weather, etc

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Integrated Data Management Architecture

Heterogeneous Data Sources
- PM Tracking Tools
- Contractor Reports
- Weather Data
- Other Flat Files

Business Processes
- Extraction, Validation, Cleaning, and Data Delivery

Data Storage
- Validated Data

Data Presentation
- Report Engine
- Web Portals
- DashBoards
- Excel Exports
- Ad-hoc Reports

Factors to be Considered in Selecting a System
- How Well can It Manage Data Capture, Analysis, & Reporting?
- Is It Modular & Customizable to Meet Program-Specific Requirements?
- Does it Provide Out-of-the-Box Support for Wide Variety of Programs?
- Does it Force Too Many Compromises on the User?
- Does it Need Major IT Equipment and/or Staff Investment by they Utility?
- Does it Provide Role-Based Access to Data, Approvals & Reports?
- Secure, Reliable and Available 24/7?
- Scale to Match Future Growth?

Benefits of Integrated Data Management Systems
- Unify Data from Multiple Sources in Consistent Form and Format
- Free Up PMs to Focus on Planning, Design & Management
- Rapid Program Launch & Ramp-Up
- Flexible and Customizable Report Generation
- Track Changes To Program Data And Assured Repeatability Of Past Reports
- Consistent Data Source For Measurement & Verification Activities
- QA/QC Checks on Data
- Audit Trail for Regulatory Compliance

NVEnergy Results BEFORE System

Without an Integrated Data Management System:
- Reports Filed 1 Year or Later After End of Program Year
- Repeat Interactions with Program Staff, Implementation Contractor to Complete M&V
- Unable to Guarantee Reports Can be Repeated or Underlying Data Could be Traced Reliably

NVEnergy Results AFTER System

After Installing System
- Year 1: Reports Filed within 4 Months
- Year 2: Reports Ready within 7 Days
- Now: Real-Time Reporting Each Month
- Reports are Repeatable and Auditable
- Consistent M&V Data Available Across the Full Portfolio of Programs Covering 3 States