

The VELCO logo is displayed in a bold, white, sans-serif font. It is positioned in the upper left corner of the slide, set against a background image of a Vermont landscape with rolling hills and power lines.

**VELCO**

VERMONT'S TRANSMISSION RELIABILITY RESOURCE

# VELCO Power Accounting System

October 20, 2011

# History of Current System

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- Created in 1998
- Two part cost - \$1.8M
  - IBM programming
  - Seven internal staff programming and on going enhancements through 2007
- Limited to Metering and Settlement
- Billing & scheduling – manual spreadsheets with significant extracts from current system and ISO-NE information
- Resettlement – use metering system but roll back implemented code changes

# Current System

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- Monthly code changes over the past three years in a system that has:
  - Over 700 tables and procedures (some not used)
  - Unknown number of triggers
  - Lost code
  - Departed support staff
  - Unsupported version of Oracle
  - Two separate databases improperly linked
  - No documentation (Black Box)
  - Working directly at the Oracle prompt (type wrong statement can add, delete, or change data)

# Buy or Build (Lodestar vs. custom built)

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- VELCO evaluated replacement of existing situation
- Objectives:
  - Lowest maintenance cost
  - Well supported and documented
  - Flexible to meet evolving markets
  - 10 year life
- Findings:
  - Similar price tags: designing and building the rules
  - Lack of knowledge of current process makes buying or building a new system difficult
  - Buy limits support options and usually has higher annual maintenance fees
  - Buy provides future enhancements by the company

# Comparisons

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- Spoke with Ken Fell Former CFO of NYISO
  - Each balancing authority is unique and off the shelf systems have to be heavily customized.
  - We found the support costs and flexibility in a customer built system better met our needs
  - Several utilities were scraping expensive off-the-shelf systems for custom built systems
  - Data points he provided from his research:
    - Ercot – Areva +\$300M
    - ISO-NE custom built \$150M for \$7.5B market (2%)
    - VELCO system \$7M for \$350M market (2%)

# New Power Accounting System

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- Open architecture
  - multiple options for support
  - lower maintenance costs
- Utilizing Industry standards for structure and controls
  - Graphical User Interface to protect data, facilitate data review, and automate manual processes
  - Upgradable database, services layer, and modules
  - SQL Database (majority of organization is SQL)
  - Metering, scheduling, settlement, billing, and resettlement modules