



# Evaluating Annual Savings from Custom Projects: A Balancing Act

*Presented at the  
18<sup>th</sup> National Energy Services Conference and Expo (NESC)*

*January 30, 2008*



# Agenda

- Background
- The Balancing Act
- Practical Solutions

# Enbridge Gas Distribution Mainly Serves Ontario's Urban Areas



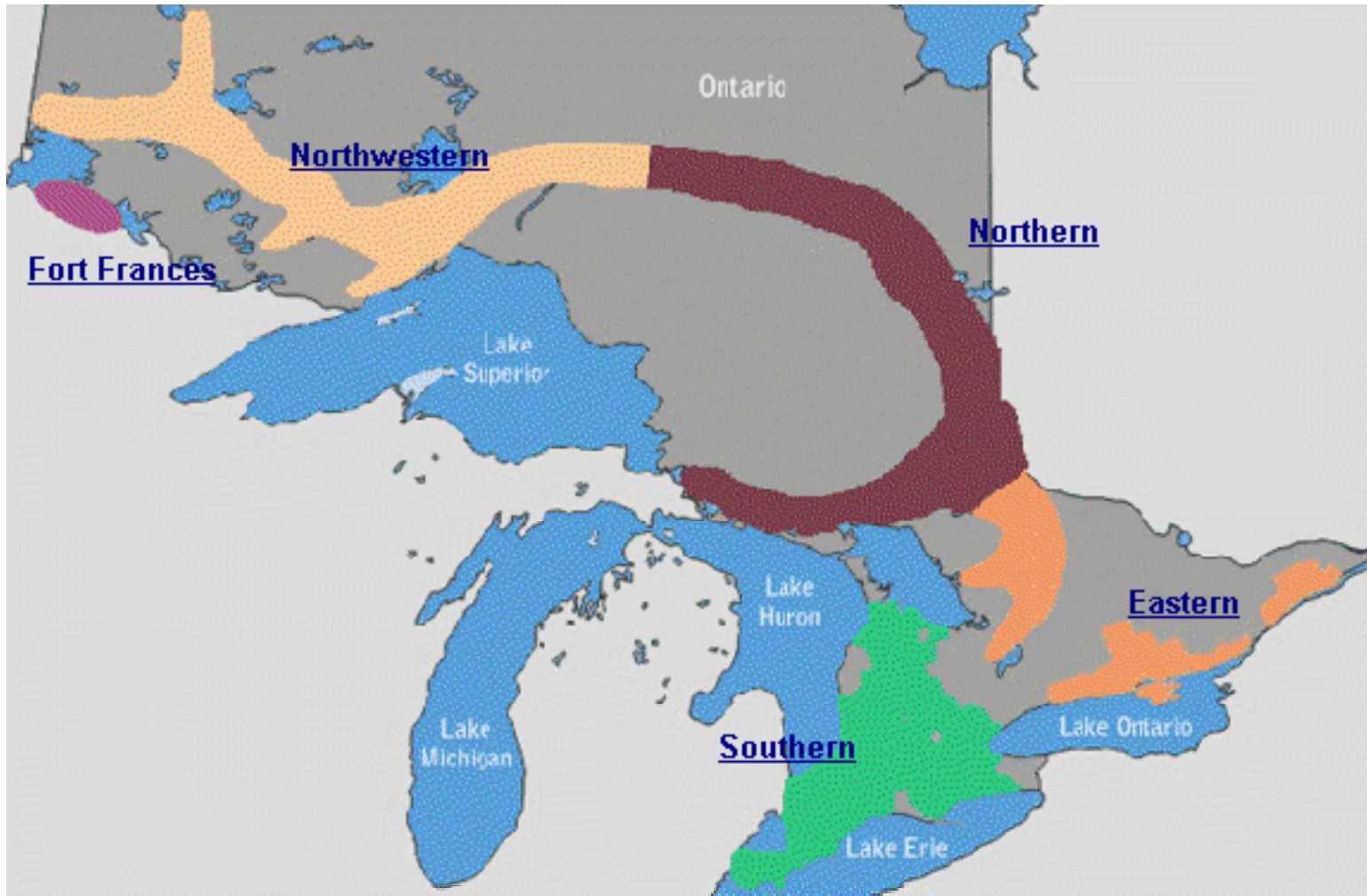
 Aux Sable

 Noverco Inc.

 Enbridge Gas Distribution

 Enbridge Gas New Brunswick

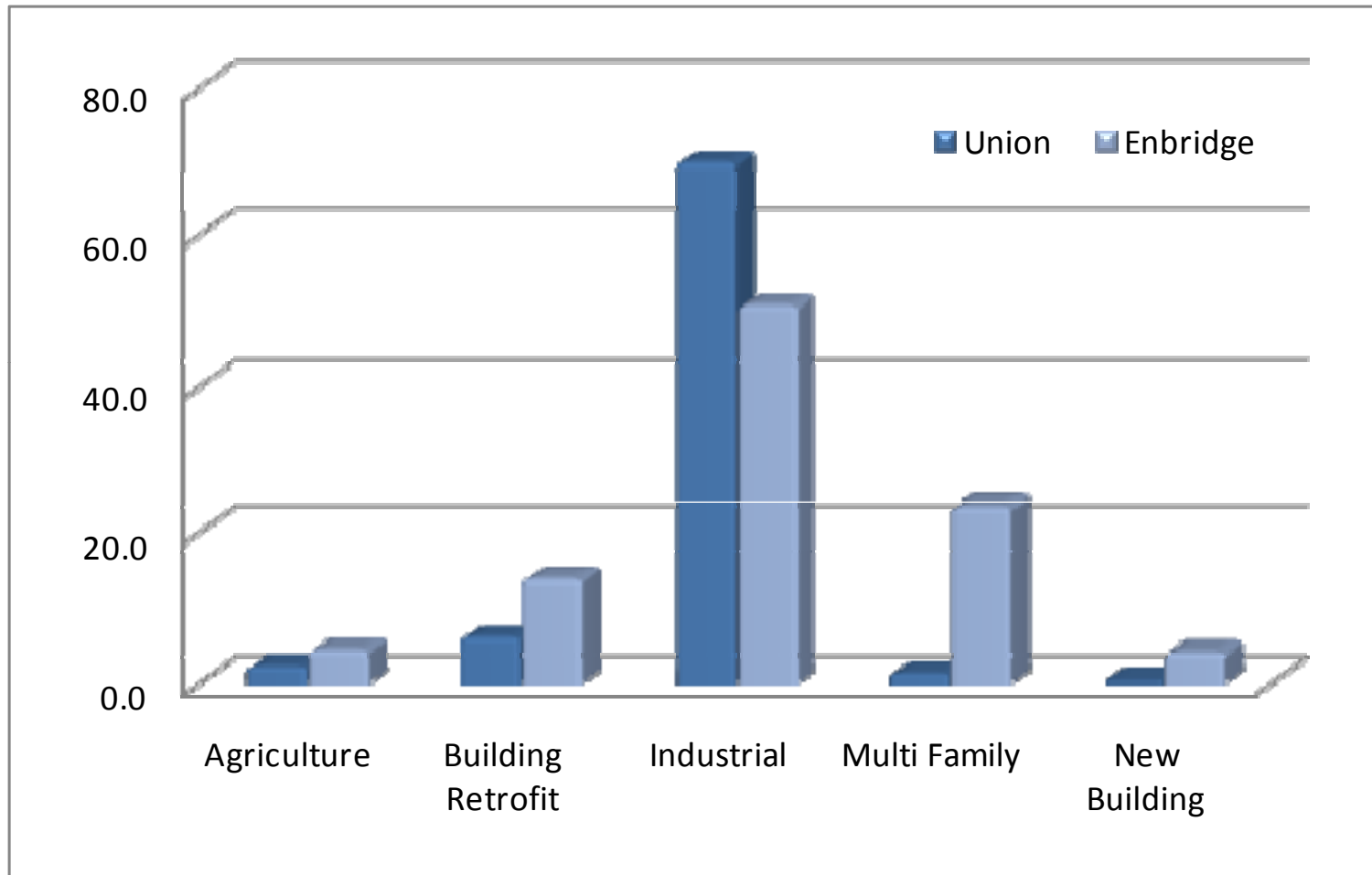
# Union Gas Serves Large Industrial & Smaller Communities



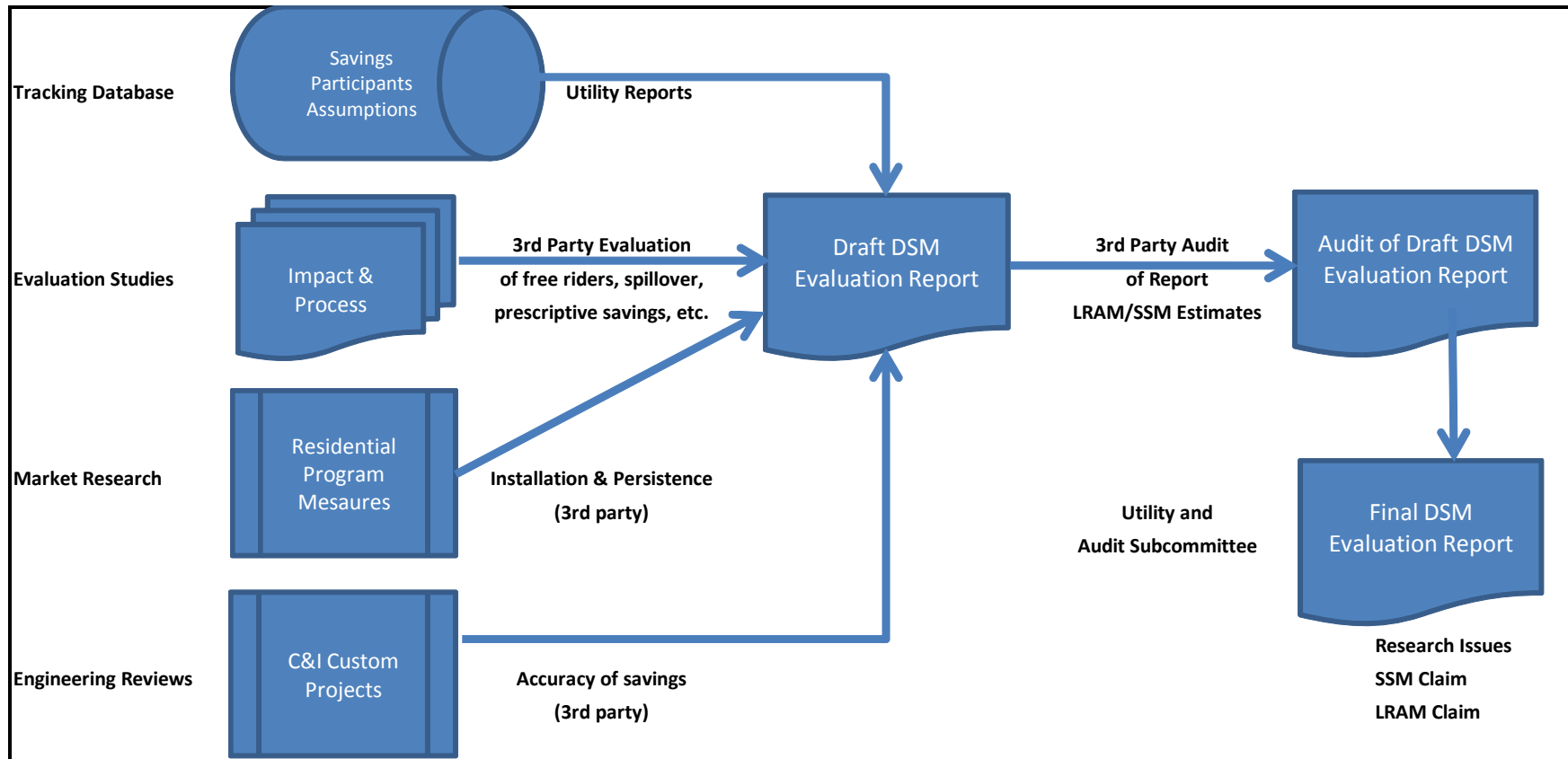
## Gas DSM provided over \$350 million net benefits in 2006

Statistic	2006
Gas Savings	179 10 <sup>3</sup> m <sup>3</sup> (6.3 bcf)
Net Benefits	\$386 million
Performance Incentives	> \$15 million
Lost Revenues	> \$1 million
% Custom Project Savings	70 to 90 %

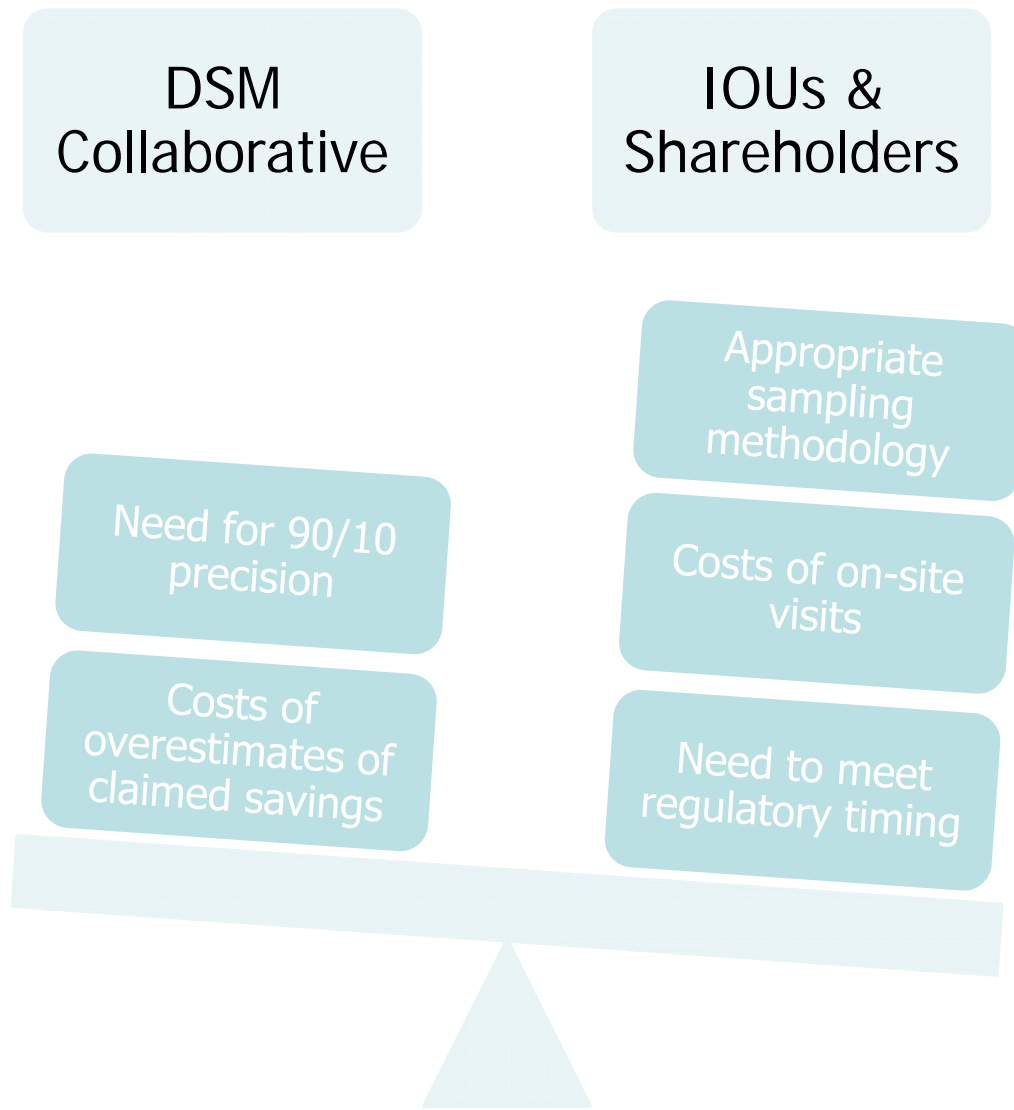
# Savings from custom projects vary by utility and sector



# Gross energy savings from custom projects are reviewed annually



# Stakeholder confidence in results must be balanced with utility issues





## Some practical solutions to consider

- Establish appropriate sample sizes
- Stratify to increase precision
- Develop specifications & methodology
- Improve quality control

## A key issue is to establish appropriate sample sizes

### Current Evaluation Protocols

- > New York and California require 80/20 to assess gross energy savings.
- > Ca Protocols - traditional criterion imposes a disproportionately larger burden on small programs

### Robust Benefit-Cost ratios

*"...higher <TRC> ratios guarantee cost-effectiveness even with considerable estimate imprecision...a 90/10 criteria for precision seems excessive for most programs. " (LBL 1995)*

# Stratifying samples will increase precision

- 3 levels of stratification is best
- By homogeneous groups
  - > Commercial and industrial
  - > Size of project
  - > Commercial segments

## Develop specifications and methodology for reviews

- Engineering review rather than whole building analysis for commercial
- Use paper reviews to identify key assumptions
- Include on-site visits for industrial projects

## Contributions of real-time quality control

- On-site visits to establish installation before project funds are released
- Identify critical assumptions at project approval
- Follow-up calls to track changes in building use, industrial processes, etc.

## Cost-effective reviews of custom projects gas savings

- Ontario's gas utilities achieve significant savings and net benefits from DSM programs.
- As C&I custom projects provide most savings assessing accuracy is critical but needs to be balanced with cost & timing of annual reviews
- Practical solutions include applying appropriate sample requirements for precision, stratifying projects, & implementing real-time quality control

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