Keep the Focus on the Big Picture: An Analytical Method for Evaluating Commercial Retro-commissioning Net Impacts

Min Yu & Anthea Jubb

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Practical and Scalable Approach to Evaluate Operational Program with AMI Data

Consumption Data Analysis (RCT or Quasi-Experimental Design)

➢ net impact
➢ low cost
➢ can be replicated
➢ no new data collection required
➢ no site work
➢ reliable result
BC Hydro’s Continuous Optimization Program

Targets operational kWh savings in commercial buildings

Program Offer

➢ Fully funded retro-commissioning study

➢ Fully funded Energy Management Information System
Classification of Load Shape

Day Operations

Overnight Operations

Day & Evening Operations

No Operations
Methodology of Impact Analysis

- Quasi-Experimental Design – Variation in Adoption
- Analysis of Covariance (ANCOVA) - by Day Type & Load Shape

*Daily Average Energy Usage Intensity (EUI)* modelled by:

- HDD
- CDD
- Participation of program (0/1)
- Participation of other Energy Efficiency program (0/1)
- Interaction with other Energy Efficiency program
- Square footage of facility
- Magnitude of energy usage
Conclusion

- On average, 5% of savings were achieved;
- Keep focus on the forest other than on trees.
Questions?

Contact:
Min Yu
BC Hydro
333 Dunsmuir, 5th Floor
Vancouver, B.C., V6B 5R3
(604) 623-3538
min.yu@bchydro.com