

# Impact Evaluation

Ryn Hamilton has an advanced degree in econometrics and spearheaded some of the earliest econometric-based impact evaluation studies in the 1980s. The past decade has produced advances in the art that have significantly elevated its practice.

Evaluators are acquiring experience to better connect the flow of digital data to impact evaluation. With smart grid, AMI and smart devices in buildings interval meter data is collected at a far more granular level to support impact evaluation. The optimal evaluation approach leverages this rich information and assesses the unique attributes of each program, including outside forces influencing performance.

Rigorous impact evaluation has become essential as program savings are treated as a tangible resource in utility portfolios and a basis for system planning decisions. In ISO/RT0 markets, rules for M&V are governed by FERC and frequently require telemetry data and specified baseline approaches.

Pressure for improved impact evaluation grows as twenty-five states have adopted Energy Efficiency Resources Standards, and resource reliability must be demonstrated. States and jurisdictions are increasingly looking to energy efficiency as a compliance strategy for Environmental Protection Agency air quality rules.



Impact evaluation must be performed on a regular schedule and a reasonable percent of program expenditures should be devoted to its practice. The risk of under-investment is not only a drift in program focus that can result in an erosion of program quality, but potential gaps in resource adequacy.

In some jurisdictions, relatively new programs are being evaluated. This can create its own set of challenges for the evaluator. It can be difficult to predict which ones will warrant the greatest impact evaluation resources, and implementers do not always have the ability to shift funding mid-cycle. This can result in negligible evaluation of programs that turn out to be very successful because there is no mechanism to shift resources away from other programs.

We have helped solve many impact evaluation and baseline challenges across the spectrum of programs, and welcome an opportunity to discuss your particular needs.

## **Evaluation Activities**

Participated in four *North American Energy Standards Board* working groups to craft M&V standards for energy efficiency and demand response in wholesale and retail markets.

*ISO New England Demand Response Working Group.* Involved in stakeholder discussions of baseline, M&V and settlement rules for demand response resources in the forward capacity market.

Performed an independent assessment of regression models developed by the utility's evaluation contractor to estimate impacts from demand response programs.

Developed monitoring and verification plans for numerous utility energy efficiency and demand response programs.