Validator

Validator is a Measurement & Verification (M&V) tool developed by the Energy Systems Lab. It quantifies the energy and cost savings obtained from the Continuous Commissioning® process. While estimating savings prior to a project is essential in making correct decisions, Validator calculates how much was actually saved by applying the CC® process.

Validator accepts and stores monthly energy consumption data from utility bills. Once a baseline time period is defined, Validator creates an inverse-model using outside air temperature, outside air enthalpy, or any supplied variable. The baseline model accounts for different billing period lengths and for weather.

Validator uses the baseline and post-CC® data to produce metrics and charts for an M&V report. These M&V reports serve as evidence as to how much was energy and cost were saved. Validator can be used in conjunction with Sustainer to identify savings degradation over time.

The Energy Systems Laboratory

The Energy Systems Laboratory (ESL) at the Texas A&M Engineering Experiment Station is the premiere research lab in energy reductions and emissions reductions in the state of Texas.
- The ESL has developed the Continuous Commissioning® process, which creates comfort and increases energy efficiency. The ESL licenses this process and software to companies which implement the CC® process.
- The ESL educates undergraduate and graduate students and develops technology in the HVAC area. Our graduates are advancing the state-of-the-art for a variety of HVAC technologies.

Figure 1: Validator automatically creates a baseline regression model.

Figure 2: Realized savings are estimated by comparing the model and the new consumption data.