

The Value of a Performance Tracking System

REAL-TIME
metering



TRACK
key variables



AUTOMATE
data collection



ANALYZE
performance



IMPROVE
awareness



Tracking energy performance is a critical part of any Strategic Energy Management (SEM) engagement. Improved awareness of how energy is used will lead to better, more-informed decisions that can result in verified energy savings. The measurement system and characteristics (i.e., frequency of data collection, data intervals, etc.) will vary by system and facility.

What is an ideal Performance Tracking System?

A Performance Tracking System (PTS) automates the collection of energy consumption data from electric utility meters or submeters, along with production or other key energy driver data, into an online data collection system - an Energy Management Information System (EMIS). During a SEM engagement, key variables (i.e., energy, production, weather, operational modes, etc.) may be collected and tracked to establish a baseline energy use profile and monitor performance. SEM participants are responsible for purchasing and installing their PTS which may include energy metering hardware, an EMIS, and/or other data collection software used to analyze energy performance, determine energy savings, or help establish cause and effect.

Real-time performance tracking provides quick feedback when changes are made and allows for awareness and response when backsliding occurs. Existing utility data collection systems or control systems may not achieve these goals without upgrades or enhancements.

The Bonneville Power Administration (BPA) offers utility customer incentives for PTS setup/installation and annual maintenance to help their end-users offset these costs. See the [BPA Implementation Manual](#) section 10.3.3 Performance Tracking System for more information.

Available Incentives

up to

\$15,000

for PTS
setup / installation*

\$10,000

for PTS maintenance*

*may be multi-phased

¹ An EMIS or other data collection software may require monthly data fees or annual licensing fees.

OTHER ELECTRICAL DATA COLLECTION

When real-time data is not available, other forms of data collection may be used, such as:

- ✓ **Utility interval data:** Energy use at daily, hourly, or finer intervals is tracked to document true savings over time (Preferred option).
- ✓ **Monthly utility bill data:** Energy billing data is tracked to document true savings over time. Billing period data may be reapportioned to calendar month for accurate year-over-year comparisons, or bills with staggered meter read dates may be reapportioned to align with the meter with the largest load.
- ✓ **Submetering or data logging:** When a measurement boundary is limited to a particular subsystem rather than the whole facility, specific equipment or zones may need to be metered separately.
- ✓ **Measured process or subsystem parameter(s):** For example, air flow (e.g., cubic feet per minute) on a compressed air system could be measured to gauge progress of a leak or load reduction effort. Flow data could serve as a proxy for energy use and be correlated to the energy use of the air compressors.
- ✓ **Supervisory control and data acquisition (SCADA) data or data logging:** Especially when a top-down forecasting model is not possible with available data, the end-user's SCADA system or other data logging may be used to evaluate savings from specific O&M measures. (NOTE: BPA customer service engineers and/or third-party contractors may be able to assist with data logging efforts.)

How do utilities report PTS?

PTS payments will be reported in the Bonneville Energy Efficiency Tracking System, or BEETS, using the Bulk Upload Template widget from the Dashboard tab. Customers will select their appropriate Utility and Program from the dropdowns and choose their UES Measure Upload Template file and click 'Upload File'. After 1-4 hours, your data will be loaded and an application will be created in BEETS. On the Workflow tab, there will be a list of To Do tasks. Click on the 'Technical Review Documentation Upload' task to select, and upload the required PTS Verification Report(s) or PTS Maintenance Documentation with each application in BEETS².

BPA created the Performance Tracking System Calculator, located in both Commercial and Industrial Sector sections of the [Document Library](#) on bpa.gov. This optional calculator is an easy way for customers to keep track of their PTS payments provided to each SEM participant, while including the necessary data and guidance to manually complete and save a BPA UES Measure Upload Template.

The screenshot displays the BEETS system interface. At the top, it shows the 'Current status' for 'Technical Review Documentation Upload' with a processing mode of 'Standard'. Below this, there are task counts: 13 tasks to do and 1 task completed. A list of tasks is shown, including 'Document Upload' and 'Application Form Field Entry Task'. A 'FILE UPLOAD' dialog box is open on the right, showing supported file formats (Audio, Document, Image, etc.) and a file named 'performance-tracking-system-calculator.xlsx' (48613 bytes) selected for upload. Below the task list, there are two screenshots of the 'SEM Project' form. The first is the 'PTS Maintenance' form, and the second is the 'PTS Installation' form. The 'PTS Installation' form includes sections for 'PTS Information', 'PTS Installation Funding', 'Results', and 'BPA Technical Review'. The 'Results' section contains a table with columns for 'Calculate Reimbursable Per Unit' and 'Calculation Project Cost'.

	Calculate Reimbursable Per Unit	Calculation Project Cost
Phase 1	Cubic Feet	Cubic Feet
Phase 2		

² For detailed instructions, refer to the BEETS Navigation Guide available on bpa.gov.

Contact your BPA energy efficiency representative if you have questions.

