

OPPORTUNITY

Why is GSA interested in circuit-level submetering and analytics?

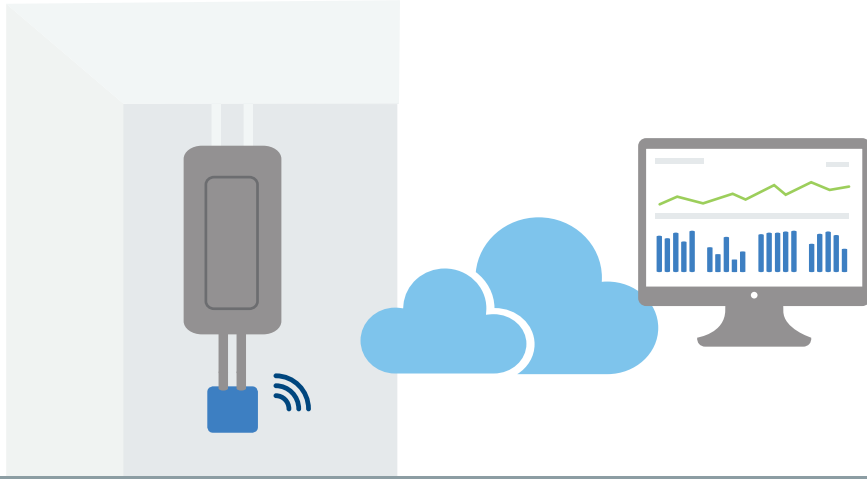
MONITOR AND ANALYZE INDIVIDUAL CIRCUITS FOR GRANULAR ELECTRIC CONSUMPTION

TECHNOLOGY

How does the full-panel submetering and analytics system work?

METER & DATA STORAGE WITH CLOUD-BASED ANALYTICS

Monitors up to 42 circuits; voltage taps power the system



M&V

Where did Measurement and Verification occur?

NATIONAL RENEWABLE ENERGY LABORATORY (NREL) assessed the full-panel submetering and analytics system at the Salt Lake City Courthouse. Technology was provided by Enertiv.

RESULTS

How did full-panel submetering and analytics perform in M&V?

<3%

ERROR IN MEASUREMENT

using high-accuracy current transformers (CTs) which are critical for low power circuits¹

10%

HVAC LOAD SAVINGS

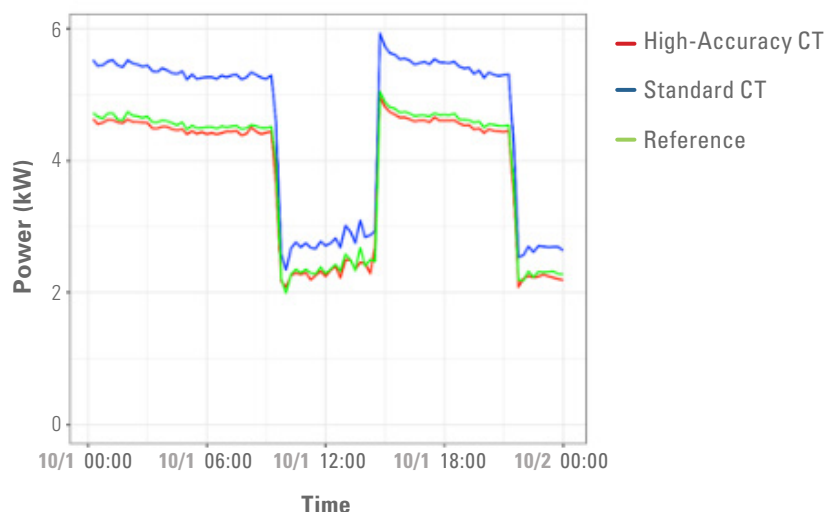
by utilizing submeter data that identified lead/lag programming issue²

1 YR PAYBACK

based on accurate costs for overtime tenant billing. Metered energy use was double the estimate³

High-Accuracy CTs Tracked with Revenue-Grade Reference Submeter

Standard-accuracy CTs did not meet requirements for tenant billing



DEPLOYMENT

Where does the study recommend deploying full-panel submetering and analytics?

ACCURATE TENANT BILLING

Most value when monitoring overtime utilities or devices that have high power consumption. Pilot project recommended to determine best practices, including changes to GSA billing practices.

¹Case Study: Laboratory and Field Evaluation of Circuit-Level Submetering with an Integrated Metering System, Dylan Cutler, Willy Bernal Heredia, Jesse Dean (NREL), May 2019, p.27 ²Ibid, p.30 ³Ibid, p.37