Perform a Utility Bill Audit

All ECM content was independently developed and reviewed to be vendor-, product and service provider-neutral.

Description

Understanding your utility bill, how your facility is charged and checking for errors can go a long way in unlocking savings you never thought possible. This ECM will guide you through performing your own utility bill audit.

Project Talking Points

- It is easy to ignore utility bills and just pay what the utility charges. In fact, many facilities managers, who have the most impact on the facility’s energy use, never see the utility bills before (or after) they are paid by accounting.
- How a utility bill is calculated is not consistent across different utilities or even across rate classes within the same utility.
- Understanding how your facility is charged for energy can unlock possibilities for energy saving strategies, such as load shifting and peak load shaving.
- Utilities can have calculation errors, meter reading errors or could have the facility in the wrong customer rate class. Catching these errors can result in a one-time cost savings or ongoing savings.

Triple Bottom Line Benefits

- **Cost benefits:** Facilities can recover costs from a billing error or reduce the recurring amount charged on utility bills.

- **Environmental benefits:** Cost savings on utility bills can be used to fund energy efficiency projects.

- **Social benefits:** Reduced utility costs will reduce the operating costs of hospitals and lower the cost of health care overall. The funding could be used to improve health care outcomes.

Purchasing Considerations
Facilities located in “deregulated” states may be purchasing energy from third-party suppliers. There can be options to be “dual billed” or “single billed.” Ensure the third-party supplier bill is audited against its respective contracts, as well.

**How-To**

1. Update processes to give facilities staff access to utility bills before they are paid.

2. Gather at least 24 months of utility bills, ideally 36 months. This will allow the auditor to compare bills over multiple years.

3. Compare the same month over multiple years to see if there are any outlier usages that may be errors. This is especially important if purchasing from a third-party supplier. Make sure the third-party supplier usage matches the usage from the utility.

4. Calculate your simple cost per unit of energy (cents per kilowatt hour is the most popular for electricity). It won’t paint the entire picture, as there are other charges, but it will be a quick way to spot outliers.

5. Call your account representative or check the utility website to find out your rate structure.
   - Are you being charged a small commercial rate when you should be charged a large commercial rate?
   - Are you being charged based on a time of day rate?
   - What is the larger portion of your bill? Peak demand or usage?

6. Check your bill for any additional charges for services such as backup utility feeds. These can be tens of thousands of dollars per month. Your utility may be willing to negotiate that charge.

7. If your facility is a non-profit, ensure sales tax is not being charged.

8. Physically check your electric meter to see if your latest bill makes sense based on the readings. If your facility has submetering or if your building automation system (BAS) logs usage, make sure these submeters closely follow the utility meter.

9. Look for any meters that consistently have zero usage. Can these meters be shut down to avoid the monthly charges?
10. Start tracking your energy use, whether that includes a simple spreadsheet or using a tool such as The American Society for Health Care Engineering (ASHE) Energy to Care tool and/or ENERGY STAR® Portfolio Manager.

Case Studies

- Large industrial customer in Ohio
  - One electric meter with three submeters in close proximity.
  - Upon inspection, it was discovered the meter reader was adding all four meters together for usage.
  - After a utility bill audit, it was discovered this had been happening for over two years.
  - The customer received a six-figure credit from the utility.

- Mid-sized hospital in Ohio
  - Finance flagged a high utility bill.
  - The facility director triggered a utility bill audit.
  - It was discovered that a third-party supplier had charged the incorrect usage.
  - This resulted in six-figure savings for the hospital.

Resources

- Many utilities will have an online calculator to type in usage and calculate your cost
- Excel spreadsheets
- ASHE: Energy to Care Dashboard
- ENERGY STAR Portfolio Manager

ECM Synergies

- Energy procurement
- Establish a baseline for energy consumption
- Load shifting and peak shaving
- Measure and benchmark energy purchases

ECM Descriptors
Category List:
- Contracted services
- Energy
- Supply strategies

ECM Attributes:
- Energy
- Strategies/projects

Improvement Type:
- Alternative sources

Department:
- Engineering/facilities management
- Purchasing, materials management and supply chain