

Part 4 – Energy Management

Review Questions

1. **What can be used to monitor energy consumption?**
 - a. Utility data
 - b. Energy Star Portfolio Manager
 - c. Building Automation System
 - d. Occupancy schedules
 - e. A, B & C**
 - f. B, C & D

2. **What is the most common form of energy used?**
 - a. Natural gas
 - b. Electricity**
 - c. Fuel oil
 - d. Liquid propane gas

3. **Energy Accounting is key to be able to (select all that apply):**
 - a. Judge performance.**
 - b. Identify funding sources.
 - c. Improve operations.**
 - d. Save money.**

4. **What are two energy-related charges on a typical electric bill?**
 - a. Administrative costs (\$) and energy consumption (kWh)
 - b. Energy consumption (kWh) and demand (kW)**
 - c. Renewable energy and distribution charges
 - d. Energy consumption (kWh) and water consumption

5. **What sentence describes the term “Peak demand” best?**
 - a. Peak Demand is the time when occupants call all at once demanding temperature changes.
 - b. Peak Demand is the highest power load measured during a segment of an hour in a billing period which represents the highest point of customer consumption of electricity.**
 - c. Peak Demand is when maintenance work orders are at a high level and maintenance employees have to be “all hands-on deck”.
 - d. Peak Demand is when water consumption is measured to be at its highest during a 24-hour period.

Fundamentals of Energy Efficient Building Operations



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6. The calculation for the Energy Utilization Intensity (EUI) requires which of the following:
 - a. **Energy consumption and square footage**
 - b. Electric consumption only
 - c. Natural gas consumption only
 - d. Square footage and water consumption

 7. A building with 150,000 SF uses 8,700,000 kBtu. The building's EUI is...
 - a. 79
 - b. **58**
 - c. 63
 - d. 17

 8. **ONE disadvantage of the Energy Utilization Intensity is**
 - a. Difficult to calculate.
 - b. **Not weather normalized.**
 - c. Hard to compare buildings year-to-year.
 - d. There is no industry standard approach.

 9. **Benchmarking... select all that apply**
 - a. **...is a continuous, systematic process for evaluating energy performance of a building.**
 - b. ...is the goal you want to achieve with your energy conservation measures.
 - c. **...identifies how a building performs relative to previous performance, portfolio, national average, standard.**
 - d. **...collects data and compares it to a standard providing deeper insight.**

 10. **What is Energy Star Portfolio Manager (ESPM)?**
 - a. ESPM is a consulting firm that helps their customers manage their energy portfolio.
 - b. **ESPM is an interactive energy management tool.**
 - c. ESPM is a magazine featuring the latest developments and research about energy.
 - d. ESPM is professional certification qualifying a person to be an Energy Accountant.