LEED O+M: Schools | v4 - LEED v4

Demand response

Possible 3 points

Glossary

Intent

To increase participation in demand response technologies and programs that make energy generation and distribution systems more efficient, increase grid reliability, and reduce greenhouse gas emissions.

Requirements

Establishment

Evaluate building systems and equipment for participation in a demand response program. On-site electricity generation does not meet the intent of this credit.

Case 1. Demand response program available (3 points)

Participate in an existing demand response (DR) program and complete the following activities.

- Have in place a system with the capability for real-time, fully automated DR based on external initiation by a DR program provider. Semi-automated DR may be utilized in practice.
- Enroll in a minimum one-year DR participation amount contractual commitment with a qualified DR program provider, with the intention of multiyear renewal, for at least 10% of the annual peak electricity demand. Peak demand is based on electric utility bills.
- Develop a comprehensive plan for meeting the contractual commitment during a Demand Response event.
- Include the DR processes in the current facilities requirements and operations and maintenance plan.
- Initiate at least one full test of the DR plan.

Case 2. Demand response program not available (1 point)

Have infrastructure in place to take advantage of future demand response programs or dynamic, real-time pricing programs and complete the following activities.

- Develop a comprehensive plan for shed at least 10% of the annual peak electricity demand. Peak demand is based on electric utility bills.
- Include the DR processes in the current facilities requirements and operations and maintenance plan.
- Initiate at least one full test of the DR plan.
- Contact local utility representatives to discuss participation in future DR programs.

Case 3. Permanent load shifting (2 points)

Implement electrical load shifting measures with the following requirements:

- Have in place during the performance period a system which permanently transfers electricity demand from peak hours to off-peak hours as defined by the local utility provider.
- Demonstrate that the facility is successfully reducing peak demand by 10% during the performance period as compared to peak electrical demand by:
  - Identifying all load shifting measures and their intended peak electrical load shift
  - Verifying a corresponding peak electrical load reduction for each measure
  - Verifying a corresponding off-peak electrical load increase for each measure
- Include the load shifting measures in the current facilities requirements and operations and maintenance plan.

Performance

None.