



Ongoing Operations



Project:

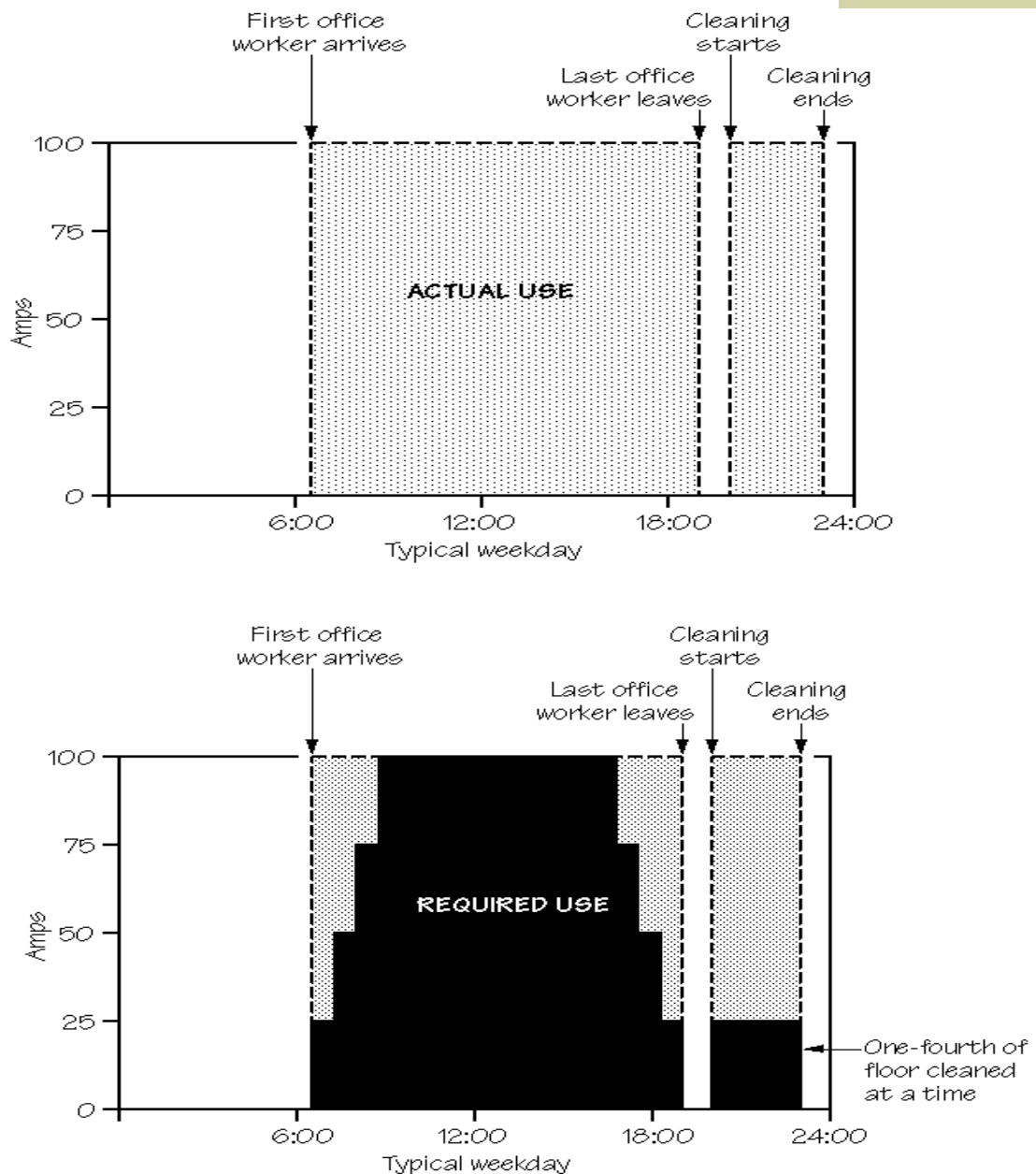
**An Assessment of Current
Practice in the Energy-Efficient
Operation of Buildings**



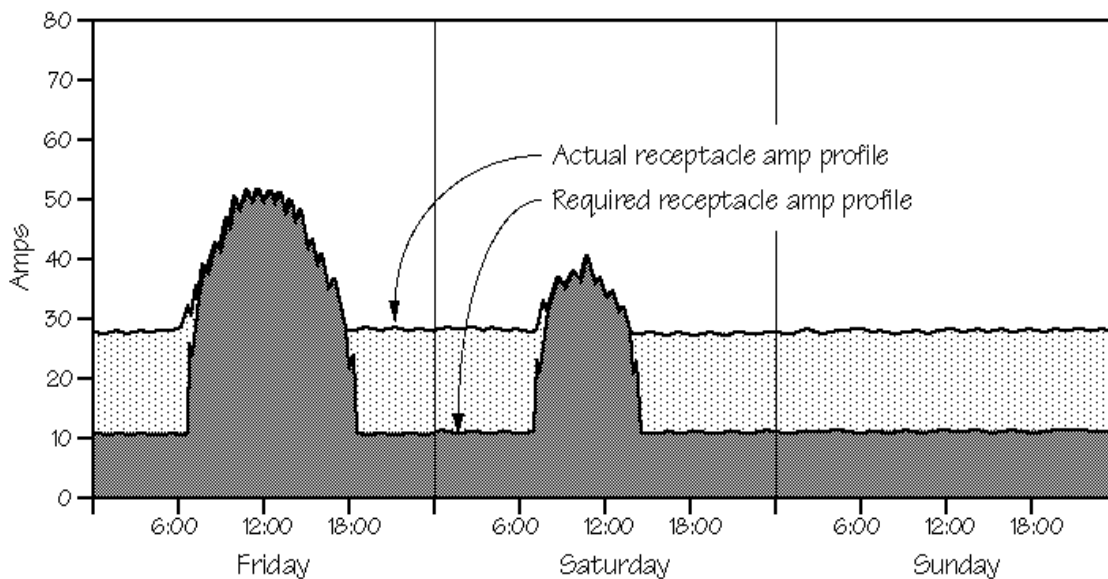
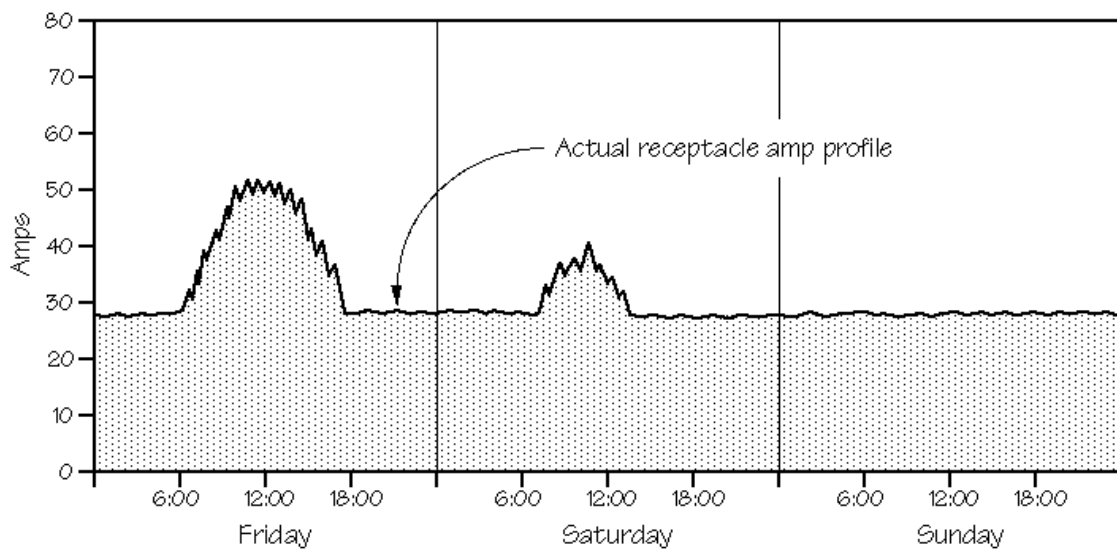
Goal of Energy-Efficient Operation

To ensure that each significant energy-consuming device uses only as much energy as necessary to perform its intended function.

Energy-Efficient Operation of Lighting



Energy-Efficient Operation of Office Equipment



Risk of Not Sustaining Energy- Efficient Operation

OFFICE BUILDING OPERATIONS
CASE STUDY REPORTS
Herzog/Wheeler & Associates
Lance LaVine

MnBRC

15.4%

- Unnecessary energy use
- In excess of energy required to meet occupant needs
- Unknown to operators or occupants
- Detected by a process of verifying actual performance






Ongoing Operations





Outline of Activities:

1. Identify current participants in energy-efficient operation
2. Select a representative sample to interview
3. Collect information on current practices
4. Compile and report findings
5. Formulate recommendations for improving energy-efficient operation



1. Identify Current Participants in the Energy-Efficient Operation of Buildings



A. Facilities likely to have assigned in-house staff:

School districts

Colleges/Universities




Govt. buildings (city, county, state)

Hospitals



Corporate facilities

Owner-occupied office buildings

Large retail facilities



1. Identify Current Participants in the Energy-Efficient Operation of Buildings



B. Outside Providers

Maintenance contractors

Control companies

Commissioning providers

Consulting engineers/architects



Energy service companies (ESCO's)

Property managers






3. Collect Information on Current Practices

- *Type of facility
- *Who has responsibility for energy-efficient operation
- *What energy-consuming equipment do they deal with
- *What are their qualifications/training
- *What is their procedure/methodology
- *How do they track and report effectiveness
- *What is their contractual arrangement (outside providers)
- *What is the institutional support for the activity (internal providers)
- *Recommendations for improved effectiveness
- *Institutional barriers to improved effectiveness



5. Possible Recommendations for Improved Energy-Efficient Operation



- Key components of an effective process to sustain efficient operation
- Building types or building systems with high potential
- Training for persons responsible for energy-efficient operation
- Training for management:
 - Recognition of potential
 - How to organize and manage an energy-efficient operation process
- How to encourage more energy-efficient operation (incentives)