Chapter 12

Selection/Expansion

*F*ollowing is a list of questions and comments relating to EMSs which are most commonly asked, intelligent questions that require an answer before committing money to an EMS installation. (Those items with an asterisk [*]—should receive top priority.)

1. *What do you need—not what is available?

    All to often, prospective EMS buyers are lulled into a sale with all of the color and promises of a full blown system. Maybe a smaller simple-to-operate EMS will suffice.

2. *What are your people capable of doing—not what you would like your people to be capable of doing?

    It is easier to start with a smaller EMS that has a limited number of primary features than to have a 1,000 point system installed and must be operated by personnel who may be introduced to a EMS for the first time. Give your operators the opportunity to get comfortable with this new system on a small scale basis and gradually work into a larger more sophisticated EMS over time.

3. *What will your costs and savings ultimately be—not what some vendor has projected or verbally promised?

A common made mistake, is that an EMS is sometimes purchased by a building owner before an energy audit and evaluation is performed. Simplified forms are often provided by the EMS vendors for the owners or occupants to quantify the energy consumption by fuel type for the particular building considered. This information is then evaluated using various assumptions such as HVAC equipment scheduling, duty cycling, demand control, lighting control, and optimization of heating and cooling.

4. How long has the manufacturer been in business manufacturing EMS (or DDC) systems?

5. *How long has the installer been in business installing EMS systems?

    Be certain that just because the installer is "the best electrical contractor in the entire city," he has also had experience installing EMSs.

6. How many systems has the manufacturer installed;

    that are comparable to your proposed system?
    that are working?
    to the satisfaction of the owner?

7. Is the system modular and upward expandable?

8. Is hardware and software fully compatible from the smallest system to the largest system?

9. *Can the EMS operator communicate with the system for day-to-day operation in English language?

    Software programming for EMS operators has improved over the years. Most EMS manufacturers have provided for English language capability as well as mouse driven prompting. Recent color graphics software packages offer custom interactive displays that simulate knobs, dials, switches and gauges found

in hard-wired control panels. With the mouse you can change setpoints, operate equipment, print reports, or rework a schedule.

10. How much control over the system software does the manufacturer have? Do you have?

11. Knowledgeable computer people are not "a dime a dozen," but there are, and will be many computer engineers and technicians available in the near future.

12. Must you contact the manufacturer every time you want to consider an update program or when you want to create a new application program?

    Where is the manufacturer located, or must he travel a great distance?

13. What are the costs for the various features, changes, source codes, updates?

    Is the material taped or are you required to pay a duty charge?

14. What are the maintenance costs for 1 year? For 5 years?

15. What are the system components prices? What are the labor rates?

16. What are the qualifications of your own staff?

    Be prepared to dedicate a full-time technician-type employee for 6 months to 1 year.

17. How thoroughly will the system be checked out after installation (prior to the start of the normal 1 year guarantee period)?