

Alban Engine Power Systems

Consultant's Corner: Installation Considerations

Think of service when specifying gen set installations

Gen sets and electrical control equipment often do not get the space considerations required to ensure a proper installation in a building. Or at least it seems that way as architects design new buildings that offer tenants as much usable space possible.

It's a tough act to balance gen set space needs with other building service functions. But if you keep routine maintenance, future equipment repair needs and expansion considerations in mind, you will be able to offer your client an installation that allows the gen set to perform efficiently and reliably for years to come.

Here are some other considerations:

The generator room

Look down the road to the day extensive gen set repairs may be needed. Even the most reliable gen set, after thousands of hours of operation, will need some internal work. Will there be enough room for engine or generator disassembly? Can the unit be removed without major building alteration? You may want to specify a chain hoist or overhead crane into the room's design for these heavy chores.

Gen set support systems

Does your room design consider how add-ons such as cogeneration equipment or remote cooling systems may obstruct service of components? A remote radiator with properly routed plumbing can significantly simplify engine service and disassembly. Strategic placement of auxiliary tanks can make service checkpoints easy to find and maintenance quick to complete.

As Environmental Protection Agency (EPA) regulations tighten on underground fuel tanks, consider requirements aimed at making fuel tanks leakproof. Above-ground diesel storage tanks or other fuels (natural gas or propane) may be viable alternatives.

Look at how your gen set installation gets its air. It needs a clean, relatively cool and plentiful supply. Massive ducting should be routed with as few bends as possible, and not interfere with service sites on the gen set.

Controls

Power demand will likely grow long after clients have moved into the building, so the need for more electrical service is inevitable. Does your plan allow for such growth? Remote gen set switchgear is one option that can open up space in crowded installations.

