



LOLA has got it with gas

The London-on-line-authorities (LOLA) has repeatedly turned to gas for its air conditioning requirements.

When equipment proves reliable for a specific purpose it makes sense to install more of the same whenever an upgrade in capacity is needed.

At least, this is the business logic which applies to air conditioning systems used by the London-on-line-authorities (LOLA). The reliability and economic running of its original Servel absorption equipment system has meant that LOLA has continued to opt for the same type.

LOLA provides on-line computer facilities for financial applications for the four London boroughs of Hackney, Harringey, Hillingdon and Tower Hamlets. This includes housing and payroll facilities and major billing for more than 700,000 people. The service is in continuous operation, 24 hours a day and the air conditioning system has been steadily expanded in line with expansion of its computer facilities. P Birdsall Air

Conditioning of Hemel Hempstead has installed and serviced Servel equipment for LOLA since 1975.

The latest upgrade this year called for a further 72 kilowatts of cooling. This was met by the fitting of four Electrolux-Servel gas powered air cooled water chillers. Operating from natural gas, the 18 kilowatt water chillers have an absorption cycle which ensures that very few moving parts are needed. The principle of the unit is similar to gas refrigerators used in caravans and boats. Another advantage of the absorption cycle is that no CFC refrigerants are used.

LOLA's operators chose gas chillers for their high reliability and low repair/maintenance costs. Additionally, using multiples of smaller modules also enables the seasonal efficiency to be kept high which is more difficult when operating large machines on part load –

One of the computer rooms in the London-on-line authorities centre in London where gas is used for air conditioning, proving economical and reliable.

each module works to its full capacity since modules are switched on or off to meet the total cooling load required.

In all, there are now 16 Servel chillers at LOLA and as the units are housed on the roof no internal space or special plant rooms are required. The chillers cool the common flow and return chilled water mains which in turn serve three air handling units located around the computer suite and two smaller units located in an adjacent plant room. The chillers total 281.28kW of power.

Each air handling unit employs an electronic temperature and humidity control system which modulates a three way valve. The valve opens on a demand for cooling or humidifying. The increasing load is detected by temperature sensors in the chiller units, switching them on or off accordingly.

LOLA's continued and extended use of gas-powered air conditioning is a good testament to the economy and reliability of these systems.

Reader enquiries

Birdsall Air Conditioning

Circle no

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