Lloyd Moodie

Curriculum Vitae — 2026 | Electrical Consultant

Professional Details

Lloyd Moodie, LRM LTD trading as LRM Electrics, Unit 64 Mill Mead Industrial Centre, Mill Mead Road, London N17 9QU.

Professional Profile

Electrical consultant with approximately 51 years' experience in the electrical industry. Areas of technical expertise include electrical installation, electrical equipment enclosures, ingress protection and the technical assessment of electrical equipment, together with solar panel and photovoltaic systems and the transmission and distribution of electrical energy. Training includes an electrical apprenticeship, electrical installation certificates at Electrician, Approved Electrician and Technician levels, and electrical engineering studies.

Qualifications and Training

Qualifications and training are listed below. Electrical engineering studies are distinguished from completed qualifications.

- HTC/HND studies in electrical engineering: Level 3 completed; Level 4 not completed (1983);
- C Certificate in Electrical Installation (Technician) (1980);
- B Certificate in Electrical Installation (Approved Electrician) (1977);
- A Certificate in Electrical Installation (Electrician) (1976);
- Electrical apprenticeship completion diploma (1977); and
- Electrical apprenticeship (1973–1977).

Areas of Technical Expertise

Electrical Installation and Technical Assessment

Electrical installation and the technical assessment of electrical equipment, with attention to the relationship between the installation, its equipment enclosures and the protection provided against environmental ingress. Technical opinions are confined to matters within my expertise.

Electrical Equipment Enclosures and Ingress Protection

Assessment of electrical equipment enclosures and the protection they provide against the entry of solid foreign objects, dust and water. Interpretation of ingress protection (IP)

classifications, including the distinction between the first numeral, which describes solid-object protection, and the second numeral, which describes protection against water ingress.

Consideration of an enclosure's declared protection in relation to its intended environment and use. Technical assessment distinguishes specific IP classifications and their associated test conditions from general descriptions such as "waterproof" or "dust-resistant", with reference to IEC 60529 where relevant.

Solar Panels and Photovoltaic (PV) Systems

Technical subject coverage includes solar panels, photovoltaic modules and arrays, and the electrical relationship between PV generation and the connected installation. This includes direct-current (DC) generation at the panels and the role of inverters in converting DC electricity to alternating current (AC) for use by electrical loads or connection to the grid.

Solar-system integration topics include the interface between rooftop or other distributed PV generation and electricity distribution networks; the implications of variable solar output; and the difference between electricity consumed locally and surplus generation exported to the network. Related subject areas include the role of power electronics, monitoring and energy storage in coordinating generation with demand.

Transmission of Electrical Energy

Technical subject coverage includes the function of electricity transmission networks in transferring electrical energy from large-scale generation sources over long distances. This encompasses the role of high-voltage transmission lines and the use of higher voltages to limit energy losses during long-distance power transfer.

Coverage includes the relationship between generation, transmission and distribution, and the role of substations and transformers in converting between voltage levels. Transmission is distinguished from the downstream distribution networks that deliver electricity towards end users.

Distribution of Electrical Energy

Technical subject coverage includes the delivery of electrical energy through distribution networks to homes, businesses and other end users, and the relationship between the network supply and the consumer's electrical installation. This includes the role of transformers in reducing voltage for downstream supply.

Distribution-system topics include the integration of distributed generation such as solar PV and the change from conventional one-way supply towards two-way power flow where consumers export surplus electricity. Associated considerations include network reliability, the balance between generation and demand, and the role of inverters and monitoring in integrating renewable generation.

Expert-Report Scope

My expertise relevant to expert reporting concerns electrical installation, electrical equipment enclosures, ingress protection, the technical assessment of electrical equipment, solar panels

and photovoltaic (PV) systems, and the transmission and distribution of electrical energy. Any opinion I express is confined to matters within my expertise and the scope of my instructions. I have not been asked to express, and do not express, an opinion on issues of law, insurance coverage, contractual construction or the amount of any recoverable loss.

Overriding duty

I understand that my duty is to help the Court on matters within my expertise. That duty overrides any obligation to the person from whom I have received instructions or by whom I am paid. My evidence is independent, objective and not influenced by the pressures of litigation. I do not act as an advocate for either party.