
Overview

This unit is for you if you manage electrotechnical projects.

This unit is about carrying out pre-site planning for your operatives, ordering materials, interacting with other trades' operatives and materials and equipment scheduling. It also involves preparing risks assessments and method statements and carrying out contingency planning.

It is also about identifying areas where it may be necessary to instruct a specialist in an electrotechnical field, possibly from an external source, such as an original equipment manufacturer or commissioning agent

It requires you to ensure that work is being carried out in accordance with organisational procedures, legislation and industry regulations and codes of practice.

It is about maintaining quality control and ensuring that project activities are being carried out on time and in accordance with project specifications and drawings. It is also about ensuring that commissioning is being undertaken in accordance with safe, industry approved methods.

Performance criteria

You must be able to:

1. identify what other operatives from other trades will be at the work location and plan the coordination of your project's requirements with theirs
2. confirm the quantities for materials and equipment required and check that they are in accordance with the project budget, specifications and drawings
3. identify any areas of electrotechnical work within the project where other experts or specialists are required to undertake this work
4. identify whether such specialists are available within your own team or whether it is necessary to outsource work to an external source
5. identify a programme of work and communicate to the relevant person(s)
 - the operatives required to carry out the work
 - external sources of specialism that are required if appropriate
 - the deadlines for key activities
 - when the materials and equipment need to be at the work location
6. order the materials and equipment ahead of time to ensure their arrival on site in accordance with your scheduling
7. confirm with the relevant person(s) that risk assessments and method statements are carried out in accordance with legislation having first reviewed the following:
 - organisational practice
 - industry regulations and codes of practice
 - project specifications and drawings
8. ensure that pre-site planning is agreed with the relevant person(s) and is in accordance with the project specification and drawings
9. confirm before work starts which electrotechnical operatives are eligible and competent to:

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- operate plant and equipment
 - undertake duties allocated to them
10. allocate work activities to your operatives which optimises work efficiencies, resource usage and matches the programme of work
11. brief the operatives fully on the key details of the project, its requirements and schedule and confirm their full understanding of the same
12. check that materials, tools and equipment arrive on site:
- in sequence appropriate to the project and to other operatives at the work location
 - in accordance with the project programme of work
 - in quantities which meet the project requirements
13. confirm that factors which affect the validity of risk assessments are brought to your attention promptly to enable an amendment of the risk assessment
14. establish practicable and appropriate communications systems which provide for:
- external contractors and client requirements
 - regular visual inspections
 - recording outcomes of each planned activity
 - effective cost control
 - alerting to possible problems for the project
15. check regularly that the electrotechnical work undertaken is in accordance with the programme of work and industry approved practice and that it complies with quality assurance standards appropriate to the project
16. initiate prompt and corrective action on work which fails to meet:
- the programme of work
 - the project specification
 - industry approved practice
17. monitor the project's progress to the programme of work and specification and

drawings and take corrective action as required

18. identify problems promptly, record them fully and communicate the details to the relevant person(s)
19. agree variations to the programme of work , specification and drawings with relevant parties in accordance with organisational procedures
20. maintain the system for recording and reporting labour, material and plant costs in accordance with organisational procedures and inform the relevant person(s)
21. confirm when it is appropriate for commissioning procedures to take place and ensure that they are followed in accordance with the project requirements and industry regulations
22. oversee the removal of plant and equipment as stated in the project specification and drawings
23. prepare, complete and hand over relevant final documentation on the project to the relevant person(s) in accordance with organisational procedures

Knowledge and understanding

You need to know and understand:

1. the scope, purpose and requirements of the project which you are managing
2. the importance of planning the project in a sequence to ensure an effective project completion
3. the importance of ensuring that pre-site planning takes place including all Health and Safety considerations
4. the purpose and importance of current and accurate risk assessments and method statements and their implications for safe working
5. how to plan a project effectively
6. the importance of identifying risks and planning workable and acceptable contingencies
7. the size of workforce necessary to undertake the project requirements and comply with the project schedule
8. the safety requirements with regard to other contractors and how to plan the work allocations, duties and responsibilities of the workforce
9. the importance of briefing operatives fully about the project and its requirements
10. the importance of ensuring the sequence and delivery of materials, tools and equipment matches the project budget, programme, specification and drawings
11. systems which provide for client and contractor requirements, inspecting work, recording outcomes, cost control and alerting to possible project problems
12. the importance of checking the standard of electrotechnical work being undertaken, taking prompt action where there are problems and keeping records
13. quality assurance standards appropriate to the project
14. the importance of regularly monitoring project progress
15. the implications of poor time-management
16.
the importance of dealing with problems promptly and seeking agreement on variations and recording the agreements
17.
commissioning procedures appropriate to the project being managed and industry standards and regulations in relation to commissioning systems
18. how to prepare and complete final documentation relevant to the project and which to hand over to the relevant person(s)

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Glossary

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