

**Distribution Task Manual –
Part 11: MAINTENANCE**

**Title:
ACCESS TO WORK SITES**

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Stabilized: Approved standards¹ that:

- i. Are not health or safety standards
- ii. Address mature technologies or practices
- iii. Are required for use in connection with existing implementations or for reference purposes
- iv. Contain no identified significant erroneous information
- v. Are not likely to require revisions.

¹ The term standard covers specifications, standards, technical bulletins, technical instructions, procedures, guidelines and any other document that follow the SCOWT process

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Foreword

The Task Manual was compiled to document the task procedure to follow when doing Access Work Sites. The document seeks to ensure that the general tasks that are necessary when performing the specific / specialised work are carried out in a safe manner. This document was compiled to comply with the OHSAct 85 of 1993 requirements.

Revision history

This is new document.

Date	Rev. no.	Clause	Remarks
March 2011	0	-	Revised by: DM Ntombela / B Leslie
		-	First issue

Authorisation

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Keywords

Pre-planning, Risk assessment, Execution, Site, Procedure, Document and Safe.

Bibliography

Manufacturers Manual

1 Scope

1.1 Purpose

The purpose of this document is to provide persons doing Access to Work Sites with a step by step description of how to perform the task and it includes the critical hazards and the risks associated with the task.

1.2 Applicability

This Task Manual is applicable to persons doing Access to Work Sites in Distribution Division and the contractors employed by the Unit.

1.3 Roles and Responsibilities

The designated person or his delegate shall ensure that this procedure is implemented and adhered to. The authorised / responsible person is responsible for the safe execution of all work and activities as set out in this procedure.

2 Normative/Informative References

Parties using this document shall apply the most recent edition of the documents listed below:

2.1 Normative References

OHSAct: *Occupation Health and Safety Act 85 of 1993 and Regulations;*

EPC_32-846: Rev 0, *Operating Regulations for High Voltage systems;*

DST_34-1710: Rev 0, *Provision and Use of Personal Protective Equipment.*

DPC_34-380: Rev 0, *Identifying, Analysing, Documenting and Observing Dangerous/Hazardous tasks;*

DPC_34-227: Rev 0, *Pre-task planning and feedback process;*

2.2 Informative

DPC_34-04: Rev 0, *Procedure For The Preparation And Administration Of Distribution Standards*

3 Definitions And Abbreviations

3.1 Definitions

All definitions in EPC_34-846 and OHSAct 85 of 1993 are applicable.

3.2 Abbreviations

- a) N/A

4 Requirements

4.1 Pre-Planning

4.1.1 Materials

- a) N/A.

4.1.2 Tools and Equipment

- a) Keys

4.1.3 Personal Protective Equipment

All personal protective equipment shall be in accordance with DST_34-1710.

- a) Overall;
- b) Hard hat;
- c) Safety shoes;

4.1.4 Safety and Preparation

NOTE 1: Always ensure that necessary authorization are obtained before travelling substation / work site

- a) Conduct assessment to determine the scope of work and the resources that would be required (people, equipment, PPE, etc.) as per DPC_34-227.

Procedure

4.2.1 Risk assessment on site

NOTE 1: Beware of biting insects and poisonous snakes when opening cable trenches, panels in the substation yard, relay rooms and/or in the field.

Perform a risk assessment as per the task at hand before the commencement and during the execution of work in accordance with DPC_34-227.

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4.2.2 Task Execution

4.2.2.1 Entering the Substation / Work site gate

NOTE 1: Ensure that the gate that is in an open position is secured as it can close un-expectedly due to wind.

NOTE 2: Upon entering or gaining access to the substation ensure that unauthorized entry is restricted.

- a) Unlock and open gate.
- b) Check the gate to be secured on its hinges and report any defect.
- c) Secure the gate in an open position.
- d) After entering the substation / work site secure and restrict the access.
- e) Inspect the work-site for wasps, snakes, beehives, sharp objects, holes etc.
- f) Ensure that the vehicle is parked in a safe manner; i.e where control room is located within the HV yard avoid parking very close to the live apparatus to maintain a safe clearance when off loading tools and equipment like step ladders, antenna mast etc.
- g) Check the station primary plant earthing for damage / theft / vandalism.
- h) Ensure that perimeter fence is free from damage.

4.2.2.2 Entering the Control Room

NOTE 1: DC supply is very important for a proper functionality of the substation protection so ensure that the health status of all DC supply equipment is checked and confirmed with every visit to the substation.

NOTE 2: In entering the Battery room, check the status of the DC equipment and do not touch any faulty equipment without the appropriate PPE.

NOTE 3: Take care when opening panels / kiosks as dangerous insects and snakes could be housed in them.

- a) Inform control about the visit.
- b) Check battery charger for abnormal alarms.
- c) Ensure that the battery charger supply is ON and the volt meter is indicating the voltage of batteries.
- d) Check the protection panel indications and alarms.
- e) Check for obvious faults / hazards ie. missing trench covers, vandalism etc.
- f) Record the abnormal alarms in log book.
- g) Notify or report to Control and / or TSC about any alarms / faults found.

4.2.2.3 Exit from Substation / work sites

NOTE 1: Gates and doors that are left open provide un-restricted access which will lead to vandalism and unauthorized entry / switching.

- a) Ensure that the substation or work place is left in a clean and tidy condition.
- b) Switch OFF all lights where applicable.
- c) Notify control that the substation is being vacated and confirm that all alarms are cleared.
- d) Close and lock all doors and gates on exit.

4.2.2.4 Task Completion

- a) Complete the task relevant documents and submit to relevant sections.

5 Forms and Records

- a) The attached report shall form the record of work done.
- b) The completed report and the work-order must be returned to the Technical Services Centre or MEW (where applicable) for filing.

Annex A - Impact assessment

(Normative)

1 Guidelines

- All comments must be completed.
- Motivate why items are N/A (not applicable)
- Indicate actions to be taken, persons or organisations responsible for actions and deadline for action.
- Change control committees to discuss the impact assessment, and if necessary give feedback to the compiler of any omissions or errors.

2 Critical points

2.1 Importance of this document. E.g. is implementation required due to safety deficiencies, statutory requirements, technology changes, document revisions, improved service quality, improved service performance, optimised costs.

Comment: Statutory requirement and document revision

2.2 If the document to be released impacts on statutory or legal compliance - this need to be very clearly stated and so highlighted.

Comment: In terms of OHSAct the employer must provide the employee with task / work procedures.

2.3 Impact on stock holding and depletion of existing stock prior to switch over.

Comment: N/A, No impact.

2.4 When will new stock be available?

Comment: N/A, No impact.

2.5 Has the interchangeability of the product or item been verified - i.e. when it fails is a straight swop possible with a competitor's product?

Comment: N/A, No impact.

2.6 Identify and provide details of other critical (items required for the successful implementation of this document) points to be considered in the implementation of this document.

Comment: Documents such as EPC_32-846 should be taken into consideration when implementing the document.

2.7 Provide details of any comments made by the Regions regarding the implementation of this document.

Comment: (N/A during commenting phase)

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Annex A
(continued)

3 Implementation timeframe

3.1 Time period for implementation of requirements.

Comment: Dependent on the Change Control Committees implementation program.

3.2 Deadline for changeover to new item and personnel to be informed of DX wide change-over.

Comment: N/A, No changeover is required.

4 Buyers Guide and Power Office

4.1 Does the Buyers Guide or Buyers List need updating?

Comment: No.

4.2 What Buyer's Guides or items have been created?

Comment: None.

4.3 List all assembly drawing changes that have been revised in conjunction with this document.

Comment: None.

4.4 If the implementation of this document requires assessment by CAP, provide details under 5

Comment: None.

4.5 Which Power Office packages have been created, modified or removed?

Comment: None

5 CAP / LAP Pre-Qualification Process related impacts

5.1 Is an ad-hoc re-evaluation of all currently accepted suppliers required as a result of implementation of this document?

Comment: No.

5.2 If NO, provide motivation for issuing this specification before Acceptance Cycle Expiry date.

Comment: This document is not a specification but a maintenance task manual document which was due for revision.

5.3 Are ALL suppliers (currently accepted per LAP), aware of the nature of changes contained in this document?

Comment: N/A. No impact on LAP.

Annex A

(continued)

5.4 Is implementation of the provisions of this document required during the current supplier qualification period?

Comment: Yes, This is a revised maintenance task manual.

5.5 If Yes to 5.4, what date has been set for all currently accepted suppliers to comply fully?

Comment: N/A, see 5.4 above

5.6 If Yes to 5.4, have all currently accepted suppliers been sent a prior formal notification informing them of Eskom's expectations, including the implementation date deadline?

Comment: N/A, see 5.4 above

5.7 Can the changes made, potentially impact upon the purchase price of the material/equipment?

Comment: No.

5.8 Material group(s) affected by specification: (Refer to Pre-Qualification invitation schedule for list of material groups)

Comment: None.

6 Training or communication

6.1 Is training required?

Comment: Yes, It is necessary to train staff in the procedures of carrying out maintenance.

6.2 State the level of training required to implement this document. (E.g. awareness training, practical / on job, module, etc.)

Comment: All field staff.

6.3 State designations of personnel that will require training.

Comment: All field staff..

6.4 Is the training material available? Identify person responsible for the development of training material.

Comment: IARC_Training Dept is responsible for the development of training information.

Annex A

(continued)

6.5 If applicable, provide details of training that will take place. (E.G. sponsor, costs, trainer, schedule of training, course material availability, training in erection / use of new equipment, maintenance training, etc).

Comment: The development of training material and the implementation schedule will determine the details of training.

6.6 Was Technical Training Section consulted w.r.t module development process?

Comment: Yes.

6.7 State communications channels to be used to inform target audience.

Comment: Change Control Committee.

7 Special tools, equipment, software

7.1 What special tools, equipment, software, etc will need to be purchased by the Region to effectively implement?

Comment: None

7.2 Are there stock numbers available for the new equipment?

Comment: Not required

7.3 What will be the costs of these special tools, equipment, software?

Comment: None

8 Finances

8.1 What total costs would the Regions be required to incur in implementing this document? Identify all cost activities associated with implementation, e.g. labour, training, tooling, stock, obsolescence

Comment: No costs other than the training will be incurred by the regions and this will depend on the arrangements made for training ie Training is held regionally or nationally.

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Impact assessment completed by:

Name: ___David Ntombela_____

Designation: _Consultant_____