

ED-EDM-P1/G2 Guidelines for Works in the Vicinity of MV/LV OHL



Document Control						
Department	Document Type	Document Title				
ED	Guideline	Guidelines for Works in Vicinity of MV/LV OHL				
Issue Approval						
Prepared By	Reviewed By	Approved By				
Nizamudeen Abdul Samad Senior Engineer - OHL Signature: Original Signed and filed Separately	Wesam Al Anqar Head of Maintenance Section Signature: Original Signed and filed Separately	Nasser M. Al Naimi Manager, Electricity Distribution Department Signature: Original Signed and filed Separately				

Issue Record							
Issue No.	Date	Reason for issuing the Guidelines					
0.0	16-04-2015	First issue of the Guidelines.					
1.0	26-04-2018	Document format changed as per new KM standard format.					
2.0							
3.0							
4.0							
5.0							

Review Frequency : 3 Years

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1. Purpose

This document is intended to provide guideline* to third party contractors performing jobs in the vicinity of the KM OHL network.

*This document is issued, as a guide, to explain the procedures to be followed at the site by Third Party Contractors while working in the vicinity of MV/LV OHL. Third Party Contractor to submit specific Method statement to work in vicinity of existing MV/LV OHL wherever required based on the field conditions. The consultant of the contractor is to review and approve such Method statement and attached to SIS application for KM approval.

2. Scope

This guideline is applicable to all third party contractors applying for Service Information Sheet to work in the vicinity of MV/LV OHL:

3. Responsibilities & Authorities

Responsibilities and authorities for ensuring that these guidelines are;

- Manager, Electricity Distribution Department
- Head of Electricity Distribution Maintenance Section
- Sr. Engineer (OHL)
- OHL Engineer
- Third party contractor**

If the responsible personnel listed here above are absent, their responsibilities and authorities shall be designated to other relevant staff.

** It is the responsibility of the Contractors carrying out the Excavation works in vicinity of MV /LV OHL to follow the Rules & Regulations, Procedures and Instructions of KM to avoid damage to the KM installations. In case of any situation at site demands additional steps to be implemented other than what mentioned in this guideline, contractor has to inform the Authorized KM personnel and proceed as per the direction given by them. In the event of damage to MV/LV installations, the Contractor is not absolved from his responsibilities.

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4. Abbreviations, Definitions of Terms & Key References

Abbreviations

ΚM : Kahramaa MV Medium Voltage CKT : Medium Voltage Circuit LV Low Voltage **ENA** : Electricity Network Affairs CLU Cable Unit EDD : Electricity Distribution Department SIS Service Information Sheet EDP : Electricity Distribution Planning S/B Stand by Office EDM : Electricity Distribution Maintenance S/S Substation LOA : Limitation of Access RO Road Opening Circuit Isolation and Earthing Geographical Information CIEC GIS Certificate. System SCE : System Control Engineer

Term	Description			
Third party Contractor	A person with a formal contract to do a specific job (other than those works approved by KM)			
Site	The place where a structure or group of structures is, was, or is to be located.			
Applicant	Contractor / Consultant who applies for a job to be provided			
Limitation of Access	A form signed and issued by an Authorized Person to a Competent person in charge of work other than work on HV apparatus defining the limit of the area within which the work is to be carried out.			
Road Opening (RO)	Road Opening (RO) on-line applications/permits are related to the agencies (Municipality, KM-Water, Ministry of Interior – Traffic Dep. ASHGHAL – Drainage Affairs, Ooredoo and QP) which utilities can be affected by the works being done in a particular job: RO1 is an application for RO permit RO2 is a response to RO1 by agencies RO3 is a Traffic Department approval RO4 is an emergency RO permit (to excavate, expose up to 10m and repair the cable)			

Key References

- 1. System Operation Memorandum 'Distribution' Issue 2 dt 14/08/2017
- 2. KM Safety Manual and Safety Rules Second Edition 2014
- 3. Procedure to Work in the Vicinity of the MV and LV Network ED-EDM-P1
- 4. ISO 9000:2015 QMS Fundamentals and Vocabulary
- 5. ISO 9001:2015 Quality Management Systems

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5. Guideline

Planning

Third party Contractor/ Consultant to compare/superimpose the work drawings/scheme drawings on the updated KM record drawings and confirm the locations where the proposed excavation works may come in vicinity of existing MV/LV OHL.

5.1. Site Investigation

- Site investigation by Kahramaa is carried out prior to the approval of SIS.
- Competent Person (Site engineer or Foreman) of Contractor to verify and confirm the OHL locations on site, according to the 'Record Drawings' issued by Kahramaa against RO2.

5.2. Site Preparation

- To barricade the existing overhead line at sufficient distance (3 meters from the safe zone) with safety barricades. Place Danger boards as appropriate near the vicinity of the work to indicate the live OHL. (Already danger boards available at the OHL)
- Ensure that there is no movement of equipment's within the barricaded area by proper supervision.
- Cranes, backhoe, concrete pumps, and other material handling equipment or any other machinery with height more than 5 meters (including height/length of extended arm/boom/jib) are not allowed within 6 meters distance both either side of 11 KV OH lines. For 415 V OH lines the height of such machinery to be not more than 4 meters and this machinery are not allowed within 6 meters on either sides of 415 v OH Lines. Only hand excavation will be allowed with a limited use of jack hammer.
- If approved by KM Planning, for the temporary road construction works under the existing OHL, ensure that the OHL pole is at least at a distance of 11m from the edge of the road on either side. Also the guard wire poles have to be erected on both sides of OHL at a sufficient distance to ensure that no vehicle more than the height of the guard wire poles passes through & damages the OHL. Such guard wire pole erection has to be carried out only by Kahramaa approved contractors.

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5.3. Materials and Tools Check List:

The following items shall be available at the site as a minimum

- i. Steel/ Nylon ropes
- ii. Guard wire pole
- iii. Safety barricade
- iv. Danger Boards

5.4. Clearing the site:

After the completion of all the activities, cleaning and reinstatement at site such as compaction and compaction test, or as per QCS and ASHGAL requirements shall be strictly implemented. around the excavated area to done taking proper care and safety without movement of any equipment in the restricted area.

5.5. Responsibilities at site:

- It is the responsibility of the Third Party Contractor to ensure the availability of safety officer and Competent Engineer having knowledge of safety to be present at the site all the time during the work execution in vicinity of OHL.
- It is the responsibility of the consultant of the contractor to ensure that the contractor is following the approved Method statement, Guidelines and additional remarks by Kahramaa at all the time

6. Key Performance Indicators (KPI's)

<u>Process KPIs are covered under PQ-PQS-P1 Corporate Strategic Planning Procedure.</u>

7. Records

Records	Custodian	Record Location	Information Sensitivity	Retention Time
Contractor should have Valid RO Permit and updated KM record Drawings	Contractor	Contractor Site office	<u>Public</u>	1 year
System Information Sheet ED-EDM-P1 /F1	Contractor	Contractor Site office	<u>Public</u>	1 year

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