Tele Pbx: 051-9252937-39 (319)
Direct: 051-9252931
Fax: 051-9252031

Chief Engineer (P&E)
IESCO Head Office
Street 40, G-7/4, Islamabad

No. 9251-61 /CE (P&E)/PM (GIS) Dated: 24/09/2020

OFFICE ORDER

1. The HT Survey of the 11KV Feeders has been completed and LT survey of Islamabad Circle along with two Operation Divisions (City & Satellite Town) of Rawalpindi Circle has also been completed by M/s NESPAK under Contract No. IESCO/NCB/03/GIS/2016-17. This huge investment will not serve the purpose and the existing GIS data shall be outdated unless the Enterprise Management System (EMS) remains up-to-date. In this regard, the Competent Authority is pleased to accord approval of the SOP for Geo-Spatial data updation of all the changes (additions/shifting/removal etc.) along with attribute data updation in the distribution network surveyed by M/s NESPAK.
2. This Standard Operating Procedure (SOP) shall be applicable in the Areas of IESCO where Geographical Information System (GIS) has been fully or partially implemented and shall not be applicable in the areas where GIS System has not been implemented. The copy of which will be distributed to each circle.
3. The Planning and GIS Cells at Sub Division, Division, and Circle level have been established as per this SOP, the information regarding constitution of these cells up to Sub Division level will be communicated by respective circles to Chief Engineer (P&E) GIS team within **10** days of the issuance of this Office Order.
4. From today onward, the progress of updation of GIS shall be discussed in the monthly review meetings of circles.
5. The cut-off date for the Field Formations, will be announced by Chief Engineer (P&E) after which the Commercial Procedures of the Company, including Service Connection Order (SCO), Meter Change Order (MCO), Equipment Removal Order (ERO), Reconnection Order (RCO), submission of A-90 of every asset etc. shall not be considered completed unless the Geo-Spatial/Attribute information/GIS map (whichever applicable), shall not be attached.

This is issued with approval of Chief Executive Officer IESCO.

General Manager (Technical)
IESCO Islamabad

Copy to:

1. Chief Executive Officer IESCO for information please.
2. GM Operation IESCO for information please.
3. General Manager (TSW), IESCO Islamabad.
4. Chief Engineer (CSD) IESCO for information.
5. Director General (HR), IESCO Islamabad for information please.
6. Director General (Admin), IESCO Islamabad for information please.
7. Director General (IS), IESCO Islamabad for information and with the request to upload this SOP on IESCO website.
8. Finance Director, IESCO Islamabad for information.
9. Manager Internal Audit IESCO for information please.
10. All SEs Operation Circles IESCO for information and necessary action.
11. Project Director Construction IESCO for information and necessary action.

- GIS Master File.

ISLAMABAD ELECTRIC SUPPLY COMPANY LIMITED

STANDARD OPERATING PROCEDURE

FIELD SURVEY, MAPPING THROUGH WEB-BASED ENTERPRISE GIS APPLICATION FOR DISTRIBUTION NETWORK OF IESCO

SEPTEMBER 10, 2020
GENERAL MANAGER (TECHNICAL)

PLANNING AND ENGINEERING DIRECTORATE
IESCO HEAD OFFICE, STREET-40, SECTOR G-7/4, ISLAMABAD

DISCLAIMER

This Standard Operating Procedure (SOP) shall be applicable in the Areas of IESCO where Geographical Information System (GIS) has been fully or partially implemented and shall not be applicable in the areas where GIS System has not been fully or partially implemented.

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INTRODUCTION

SECTION – 1

SECTION – 1
INTRODUCTION

Under the project **"Field Survey, Mapping through Web Based Enterprise GIS Application for Distribution Network of IESCO"**, has been developed keeping in view of IESCO's requirements. It consists of two parts namely **Power Distribution Management System (PDMS)** which is an Android Application for HT/LT Attribute Survey and **Enterprise Management System (EMS)** which is a Web-Based Centralized Application for spatial (Geographic) and Attribute Data representation.

EMS provides a sustainable solution to update GIS Mapping of IESCO Distribution Network. It provides information regarding installed assets at HT and LT Distribution Network(s), maintains corresponding reference data (warehouse), generates multiple reports and offers interfaces to manage feeder along-with user management. The main objective of Standard Operating Procedure (SOP) is to streamline the updating process to be carried out by P&E GIS Team and IESCO Field Formations through Planning & GIS Cells constituted at Circle, Division and Sub Division Levels and the staff has been trained likewise. It shall help in forming the basis of future interventions like AMI, SCADA, Smart Grid, etc.

The ownership of this application shall stand with the operation circles up to Sub Division Level and all the entries during updation and survey of newly added equipment, lines etc. shall be the responsibility of the sub division staff who will survey the area of their jurisdiction and record each and every change in the system. The surveyors at Sub Division level will report to the Divisional / Circle GIS supervisors for validation of their recorded entries and these supervisors will be responsible to report the same to the P&E GIS Cell.

IESCO Customer Services Directorate (CSD) has developed Meter Change Order (MCO) CP-23, Service Connection Order (SCO) CP-08, Reconnection Order (RCO) CP-18, Sundry Job Order (SJO), Completion Report (A-90) etc. proformas / forms incorporating the column for verification / information by the GIS Supervisor regarding attribute and geo-spatial data of the activities. The submission of A-90 of every asset shall not be completed unless the EMS Performa **(Annexure - A & B)** verified by concerned XEN / SE along with GIS Map is not attached to the A-90 Performa.

This administrative action is required to be brought into practice so that each and every asset of the enterprise Distribution Network could be surveyed and mapped accordingly.

THE ROLES AND RIGHTS FOR E.M.S

SECTION – 2

SECTION – 2
SOP FOR E.M.S

The SOP for efficient operations and maintenance of EMS application has been further grouped with the help of application roles; that have been mutually devised by IESCO and Consultants technical teams**. Annexure-C** contains list of modules, their corresponding pages and the respective rights that are available to each role. The literature below provides description of work and duties of each role.

2.1 IESCO SURVEYOR (SUB DIVISION):

This role will be assigned to user in each sub division and their primary task shall be to survey any new feeder's HT and/or LT line along with equipment and consumers respectively. This role will also be responsible to update any physical change that requires field work in the HT and/or LT line network. These users shall be in constant communication with nominated IESCO Supervisor and P&E user to request information regarding their assigned feeder or share information with them to update reference data if and when required. IESCO surveyor shall mainly work on the Android application with only view rights to their respective feeder spatially (geographically via maps) on EMS and also can check/verify attribute data. For any correction in attribute data, the Surveyor shall report to Supervisor for any changes in the data. The newly developed peroformas attached with this SOP shall also be signed by sub divisional surveyor before processing. The Planning & GIS Cell at sub division level may constitute 1 to 3 officials with the senior person as surveyor incharge.

2.2 IESCO SUPERVISOR (DIVISIONAL):

This role will be assigned to user in every division and its primary task shall be to supervise the work done by their designated sub divisional surveyors. IESCO supervisor (divisional) shall assign and revoke feeder(s) to their corresponding surveyors. The user have the rights to add, edit and/or delete any pole, attribute information that might have been entered incorrectly at the time of survey (either when the supervisor is verifying data or on request from respective surveyor). IESCO Supervisor (divisional) shall mainly work on the web-based EMS application and can view/update spatial data of assigned feeders (only feeders of assigned division can be viewed) and make changes to attribute data as and when required. IESCO

supervisor (Divisional) can also work on line loss calculations of their respective division using EMS. The newly developed peroformas attached with this SOP shall also be signed by divisional supervisor (if required) before processing. The Planning & GIS Cell at division level may constitute 1 to 3 officials with the senior person as supervisor incharge.

2.3 IESCO SUPERVISOR (CIRCLE):

This role will be assigned to user in circle and its primary task shall be to supervise the work done by their designated divisional supervisors / sub divisional surveyors. IESCO supervisor (circle) shall assign and revoke feeder(s) to their corresponding surveyors. The user can add, edit and/or delete any pole, attribute information that might have been entered incorrectly at the time of survey (either when the supervisor is verifying data or on request from respective surveyor). IESCO Supervisor (Circle) shall mainly work on the web-based EMS application and can view/update spatial data of assigned feeders (only feeders of assigned divisions can be viewed) and make changes to attribute data as and when required. IESCO supervisor (Circle) can also work on line loss calculations of their respective divisions using EMS. The newly developed peroformas attached with this SOP shall also be signed by circle supervisor (if required) before processing. The Planning & GIS Cell at circle level may constitute 1 to 3 officials with the senior person as supervisor incharge.

The Deputy Director (Technical) shall be the focal person and shall be responsible to take care of the GIS activities carried out within its circle along with concerned XEN of the Operation Division and Sub Divisional Officer of the concerned operation sub division.

2.4 P&E DIRECTORATE (GIS CELL):

This role shall be the super user of the application. Along with performing all the tasks and accessing all functionalities that are available to IESCO Surveyors and IESCO Supervisors, P&E can create new users and manage them. It will also maintain and update the reference data (warehouse) of the application so that symmetric data entry mechanism can be achieved. P&E role can calculate line losses of all circles and shall have access to various pre-defined reports that can be generated from just a single click of button.

IMPLEMENTATION (ROLL-OUT)

SECTION – 3

SECTION – 3

IMPLEMENTATION (ROLL-OUT)

Concerned location (working boundary) based users have been created. On the basis of this, roles have been mutually finalized with required privileges to initiate EMS rollout. The roll-out mechanism has been divided into two stages

3.1 PRE-IMPLEMENTATION STAGE:

EMS follows role-based architecture where each role is defined on the basis of assigned privileges. The roles have been finalized and their respective nominated staff shall be finalized by IESCO so that all the concerned employees can take ownership of their duties to operate and update EMS. M/s NESPAK has trained the nominated staff so that their respective role can be assigned for roll-out.

3.2 POST-IMPLEMENTATION STAGE:

The nominated staff trained at implementation stage shall act as master trainers to train users at each level (i.e. Circle, Division and Sub Division) and shall plan roll-out across IESCO.

NOTE:

Initially the roles are being assigned keeping in view of the capability of filed formations, data security, mishandling of data and these roles will be revised taking into consideration the maturity of the implementation system attained by Planning and GIS Cells at Sub Divisions, Divisions and Circles Level.

GENERAL DISTRIBUTION NETWORK ACTIVITIES REQUIRING UPDATION IN EMS

SECTION – 4

SECTION – 4

4.1 GENERAL DISTRIBUTION NETWORK ACTIVITIES REQUIRING UPDATION IN EMS

The network activities required to be updated in EMS on regular basis are as under:

4.1.1 NEW CONNECTIONS (ALL CATEGORIES)

4.1.2 NET METERING CONNECTIONS

4.1.3 HT / LT PROPOSALS (UNDER DOP / ELR)

a. LT Proposals
b. HT Proposals
c. Area Planning

4.1.4 DAMAGE/DISMANTLEMENT/REPLACEMENT OF MATERIAL

a. Damage/Dismantlement/Replacement of Distribution Transformers.
b. Damage/Dismantlement/Replacement of LT/HT Cables & Conductors.
c. Damage/Dismantlement/Replacement of LT/HT Poles/Structures.
d. ERO (Equipment Removal Order).
e. DCO (Disconnection Order).
f. RCO (Reconnection Order).
g. Extension of Load.
h. Reduction of Load.
i. MCO (Meter Change Order).

4.1.5 SHIFTING OF EQUIPMENT

a. HT Distribution Line
b. LT Distribution Line
c. Distribution Transformers
d. Meters etc.

4.1.6 ANY OTHER CHANGE IN THE DISTRIBUTION NETWORK

PROPOSED SOP FOR GENERAL DISTRIBUTION NETWORK ACTIVITIES REQUIRING UPDATION IN EMS

SECTION – 5

SECTION – 5
PROPOSED SOP FOR GENERAL DISTRIBUTION NETWORK ACTIVITIES REQUIRING UPDATION IN EMS

5.1 NEW CONNECTIONS (ALL CATEGORIES)

Whenever a New connection will be installed, the Sub Divisional GIS team shall be responsible for taking the coordinates and detail of material on mobile application and forward the same to Division / Circle's GIS Supervisor for incorporation on the same day.

In case of new connection, the SCO shall be countersigned by concerned GIS official in the office of load sanctioning authority. The signatures shall be ensured by the R.O Concerned. A copy of SCO and report shall be sent to P&E Directorate for record. GIS officials at Division level, Circle Level shall countersign the Handing / Taking Over papers and will send a second copy to P&E GIS Cell for record.

The Revenue Officer shall update the information in the database and shall not start billing unless the GIS updation requirement has been fulfilled. The Divisional / Circle GIS team shall monitor the updation and send information to P&E on monthly basis. The SCO Proforma (CP-08) annexed with this SOP shall be followed by the field formations.

5.2 NET METERING CONNECTIONS

Whenever a new Net Metering connection will be installed, the Sub Divisional GIS team shall be responsible for taking the coordinates and detail of material on mobile application and forward the same to Division / Circle's GIS Supervisor for incorporation on the same day. If an existing meter is changed to Net Metering, the information shall be updated by the Sub Divisional GIS team on the same day. The Revenue Officer shall update the information in the database and shall not start billing unless the GIS updation requirement has been fulfilled. The Divisional / Circle GIS team shall monitor the updation and send information to P&E on monthly basis. The SCO Proforma (CP-08) annexed with this SOP shall be followed by the field formations.

5.3 HT / LT PROPOSALS (UNDER DOP / ELR)

5.3.1 LT PROPOSALS

a. Generation of Proposals by concerned SDO / LS Incharge.

b. After approval from P&E/Circle Office/Maintenance Head and completion of work by PD (CO)/Operation Sub Division, the work shall be mapped / updated by concerned GIS official (at Sub Division Level). The Handing / Taking Over papers shall be signed by concerned GIS Official (at Sub Division Level)

c. GIS official at Division level and Circle Level shall countersign the Handing / Taking Over papers and will send a second copy to P&E Directorate for record.

d. The A-90 shall not be accepted unless it is certified by GIS Official of the concerned Sub division/Division/Circle.

e. The A-90 proforma developed and annexed with this SOP shall be followed by the field formations

5.3.2. HT PROPOSALS

a. Generation of Proposal by concerned SDO / LS Incharge.

b. After approval from P&E and completion of work by PD (CO), the work shall be mapped / updated by concerned GIS official (at Sub Division Level). The Handing / Taking Over papers shall be signed by concerned GIS Official (at Sub Division Level)

c. GIS official at Division level and Circle Level shall countersign the Handing / Taking Over papers and will send a second copy to P&E Directorate for record.

d. The A-90 shall not be accepted unless it is certified by GIS Official of the respective Sub division/Division/Circle.

e. The A-90 proforma developed and annexed with this SOP shall be followed by the field formations

5.3.3. AREA PLANNING (SHIFTING, SAFETY HAZARDS, ETC.)

a. Generation of Proposal by concerned SDO / LS Incharge.

b. Execution authorities are SDO, Technical Committee, and Construction formation.

c. After completion of work, the same shall be updated by GIS official at Sub Division level and countersigned by GIS officials at Division and Circle levels. The certificate shall be send to P&E for record.

d. The A-90 shall not be accepted unless it is certified by GIS Official of the respective Sub division/Division/Circle.

e. The A-90 proforma developed and annexed with this SOP shall be followed by the field formations

5.4 DAMAGED / DISMANTLEMENT / REPLACEMENT OF MATERIAL

5.4.1 DAMAGE/DISMANTLEMENT/REPLACEMENT OF DISTRIBUTION TRANSFORMERS

The Sub Divisional GIS team shall be responsible for intimating the information regarding replaced transformers (its capacity, date of manufacturing etc.) on the same day to the Divisional / Circle Supervisors who will update the information accordingly. The Divisional / Circle GIS team shall validate the updation and send information to P&E on monthly basis.

a. Damage / Dismantlement / Replacement of LT/HT Cables & Conductors
b. Damage/Dismantlement/Replacement of LT/HT Poles/Structures.

5.4.2 EQUIPMENT REMOVAL ORDER (ERO)

The Sub Divisional GIS team shall be responsible for intimating the information regarding Equipment Removal Order (ERO) of the connections falling under their area of jurisdiction on the same day to the Divisional / Circle Supervisors who will update the information accordingly. The Divisional / Circle GIS team shall validate the updation and send information to P&E on monthly basis.

The Revenue officer shall update the information in the database as per Procedure in vogue and the billing information will not be updated in this regard unless the GIS updation Performa is not attached with ERO.

The ERO Proforma (CP-16) has been developed in consultation with CSD and is annexed with this SOP.

5.4.3 DISCONNECTION ORDER (DCO)

The Sub Divisional GIS team shall be responsible for intimating the information regarding Disconnection Order (DCO) of the connections falling under their area of jurisdiction on the same day to the Divisional / Circle Supervisors who will update the information accordingly. The Divisional / Circle GIS team shall validate the updation and send information to P&E on monthly basis.

The Revenue officer shall update the information in the database in the form of attribute data.

5.4.4 RECONNECTION ORDER (RCO)

The Sub Divisional GIS team shall be responsible for intimating the information regarding Reconnection Order (RCO) of the connections falling under their area of jurisdiction on the same day to the Divisional / Circle Supervisors who will update the information accordingly. The Divisional / Circle GIS team shall validate the updation and send information to P&E on monthly basis.

The Revenue officer shall update the information in the database as per procedure in vogue and the billing information will not be updated in this regard unless the GIS Updation Performa is not attached with RCO.

The RCO Proforma (CP-18) has been developed in consultation with CSD and is annexed with this SOP.

5.4.5 EXTENSION OF LOAD (EOL)

Whenever extension of load is executed, the Sub Divisional GIS team shall be responsible for intimating the information regarding Extension of Load for the connections falling under their area of jurisdiction on the same day to the Divisional / Circle Supervisors who will update the information accordingly. The Divisional / Circle GIS team shall validate the updation and send information to P&E GIS Cell on monthly basis.

The Revenue officer shall update the information in the database as per procedure in vogue and the billing information will not be updated in this regard unless the SCO Proforma annexed with this SOP is not attached with EOL Case.

5.4.6 REDUCTION OF LOAD (ROL)

Whenever reduction of load is executed, the Sub Divisional GIS team shall be responsible for intimating the information regarding Reduction of Load (S.J.O) for the connections falling under their area of jurisdiction on the same day to the Divisional / Circle Supervisors who will update the information accordingly. The Divisional / Circle GIS team shall validate the updation and send information to P&E on monthly basis.

The Revenue officer shall update the information in the database as per procedure in vogue and the billing information will not be updated in this

regard unless the SCO Proforma annexed with this SOP is not attached with ROL Case.

5.4.7 METER CHANGE ORDER (MCO)

The Sub Divisional GIS team shall be responsible for intimating the information regarding Meter Change Order for the meter falling under their area of jurisdiction on the same day to the Divisional / Circle Supervisors who will update the information accordingly. The Divisional / Circle GIS team shall validate the updation and send information to P&E on monthly basis.

The Revenue officer shall update the information in the database as per procedure in vogue and the billing information will not be updated in this regard unless the MCO Proforma annexed with this SOP is not attached.

5.5 SHIFTING OF EQUIPMENT

5.5.1 HT DISTRIBUTION LINE

The Sub Divisional GIS team shall be shall be responsible for intimating the information regarding shifting of HT Distribution Line falling under their area of jurisdiction on the same day to the Divisional / Circle Supervisors who will update the information accordingly. The Divisional / Circle GIS team shall validate the updation and send information to P&E GIS Cell on monthly basis. The A-90 proforma developed and annexed with this SOP shall be followed by the field formations.

5.5.2 LT DISTRIBUTION LINE

The Sub Divisional GIS team shall be responsible .for intimating the information regarding shifting of LT Distribution Network falling under their area of jurisdiction on the same day to the Divisional / Circle Supervisors who will update the information accordingly. The Divisional / Circle GIS team shall validate the updation and send information to P&E GIS Cell on monthly basis. The A-90 proforma developed and annexed with this SOP shall be followed by the field formations.

5.5.3 DISTRIBUTION TRANSFORMERS

The Sub Divisional GIS team shall be responsible for intimating the information regarding shifting of Distribution transformers falling under their

area of jurisdiction on the same day to the Divisional / Circle Supervisors who will update the information accordingly. The Divisional / Circle GIS team shall validate the updation and send information to P&E GIS Cell on monthly basis. The A-90 proforma developed and annexed with this SOP shall be followed by the field formations.

5.5.4 METERS ETC.

The Sub Divisional GIS team shall be responsible for intimating the information regarding Meters' Shifting falling under their area of jurisdiction on the same day to the Divisional / Circle Supervisors who will update the information accordingly. The Divisional / Circle GIS team shall validate the updation and send information to P&E GIS Cell on monthly basis. The SCO Proforma (CP-08) annexed with this SOP shall be followed by the field formations.

5.6 ANY OTHER CHANGE IN THE DISTRIBUTION NETWORK

The Sub Divisional GIS Team shall be responsible for intimating the information regarding any other change in Distribution Network falling under their area of jurisdiction on the same day to the Divisional / Circle Supervisors who will update the information accordingly. The Divisional / Circle GIS team shall validate the updation and send information to P&E GIS Cell on monthly basis.

PROPOSED HIERARCHY AND CREATION OF NEW POSTS FOR GIS CELL IN P&E DIRECTORATE

SECTION – 6

PROPOSED HIERARCHY AND CREATION OF NEW POSTS FOR GIS CELL IN P&E DIRECTORATE

Office	Incharge	Team members	Existing	Proposed	REMARKS
			No. Of posts		
P&E Directorate	PM (GIS)	Project Manager (GIS)	-	1	
		Deputy Manager (GIS) _ T&G	1	-	Re-designation the posts of DM (T&G)
		Deputy Manager (GIS) _ HT	1	-	Re-designation of the posts of DM (DD)
		Deputy Manager (GIS) _ LT	1	-	Re-designation of the posts of DM(Renv)
		GIS Specialist	1	-	
		Assistant Manager (GIS) _ T&G	1	-	Re-designation the posts of AM (T&G)
		Assistant Manager (GIS) _ HT	1	-	Re-designation of the posts of AM (DD)
		Assistant Manager (GIS) _ LT	1	-	Re-designation of the posts of AM(Renv)
		Database Specialist	-	1	
		Network Administrator	-	1	
		GIS Supervisor	1	-	
		Line Superintendent-I	-	5	1 for Each Circle
		Line Superintendent-II	-	5	1 for Each Circle
		Data Coder Supervisor	-	2	For HT & LT
		Data Coder	-	5	1 for Each Circle
		Data Entry Operator	-	2	For HT & LT
		Head Draughtsman	2	1	For LT
		Assistant Draughtsman	2	1	For LT
		Tracer	2	1	For LT
		Driver	2	1	As per Vehicle
		Naib Qasid	7	-	
Circle Office	D.M (Tech)	Deputy Manager (Technical)	1	-	
		Line Superintendent-I	-	1	
		Head Draughtsman	1	-	
Division Office	XEN	Deputy Manager (Operation)	1	-	
		Line Superintendent-I	-	1	
		Assistant Draughtsman	1	-	
Sub Division	SDO	Assistant Manager (Operation)	1	-	
		Line Superintendent-II	-	1	For HT & LT
		Lineman	-	1	For HT & LT
		ALM	-	1	For HT & LT

* *These posts were sanctioned by IESCO BOD in its meeting.*

ANNEXURES

SECTION – 7

PERFORMA REGARDING MAPPING AND UPDATING OF HT 11KV FEEDER

1. Circle _____
2. Division _____
3. Sub Division _____

SR. NO.	FEEDER CODE	FEEDER NAME	GRID STATION	HT		
				HT Poles	T/F	Conductor/Cable
				- Added, - Shifted - Dismantled	- Added, - Augmented - Shifted - Dismantled	- Added - Replaced - Line Shifted - Dismantled

Divisional GIS Supervisor:

Field Activity No ☐ Yes ☐

Entered in EMS Date:_____ Sign:_____ Assigned to Surveyor Name:_____ Date:_____

Verified By XEN: Name:_____ Date:_____ Sign:_____ Field Activity Completed Date:_____ Sign:_____

Verified by SDO Name:_____ Date:_____ Sign:_____

Verified in EMS:_____ Date:_____ Sign:_____

Final Performa and Screen Short should be Email to the Circle Office and P&E Directorate on the same day of data entry in EMS.

PERFORMA REGARDING MAPPING AND UPDATING OF LT NETWORK OF 11KV FEEDER

1. Circle _____
2. Division _____
3. Sub Division _____

SR. NO.	FEEDER CODE	FEEDER NAME	TRANSFORMER CODE	LT		
				LT Poles	Meters	LT Conductor / Cable
				- Added, - Shifted - Dismantled	- Added - MCO - Shifted - ERO	- Added - Replaced - Line Shifted - Dismantled

Divisional GIS Supervisor:

Field Activity No ☐ Yes ☐

Entered in EMS Date:_____ Sign:_____ Assigned to Surveyor Name:_____ Date:_____

Verified By XEN: Name:_____ Date:_____ Sign:_____ Field Activity Completed Date:_____ Sign:_____

Verified by SDO Name:_____ Date:_____ Sign:_____

Verified in EMS:_____ Date:_____ Sign:_____

Final Performa and Screen Short should be Email to the Circle Office and P&E Directorate on the same day of data entry in EMS.

ANNEXURE-C
Roles & their privileges

IESCO SURVEYOR

Module Name	Page Name	Add	Edit	Delete	View	Role
HT Survey	HT Survey				✓	IESCO Surveyor (Sub-Division)
	HT Survey Pole Data				✓	
	HT Survey View					
	HT Survey Edit					
	HT Survey Equipment					
	HT Survey Equipment Details				✓	
	HT Survey Equipment Edit					
	Shift Equipment				✓	
	HT Manual Section				✓	
LT Survey	LT Survey				✓	IESCO Surveyor (Sub-Division)
	LT Survey Pole Data				✓	
	LT Survey View					
	LT Survey Edit					
	LT Survey Equipment					
	LT Survey Equipment Details					
	LT Survey Consumer Edit					
	LT Survey Consumer Details					
	LT Survey Consumer View					
	LT Survey Consumer Bends				✓	
	LT Manual Section				✓	

IESCO SUPERVISOR (DIVISIONAL)

Module Name	Page Name	Add	Edit	Delete	View	Role
HT Survey	HT Survey				✓	IESCO Supervisor (Division)
	HT Survey Pole Data	✓	✓	✓	✓	
	HT Survey View					
	HT Survey Edit		✓			
	HT Survey Equipment		✓	✓		
	HT Survey Equipment Details				✓	
	HT Survey Equipment Edit		✓			
	Shift Equipment	✓	✓		✓	
	HT Manual Section	✓	✓		✓	
LT Survey	LT Survey				✓	IESCO Supervisor (Division)
	LT Survey Pole Data	✓	✓	✓	✓	
	LT Survey View					
	LT Survey Edit		✓			
	LT Survey Equipment					
	LT Survey Equipment Details					
	LT Survey Consumer Edit		✓			
	LT Survey Consumer Details					
	LT Survey Consumer View		✓			
	LT Survey Consumer Bends	✓	✓	✓	✓	
	LT Manual Section	✓	✓		✓	
Feeder Management	Feeder Management				✓	IESCO Supervisor (Division)
	Manage HT Feeders		✓		✓	
	Generate Poles	✓			✓	
	Import Feeder Point Data	✓		✓	✓	
	Points Detail		✓	✓		
	Manage Feeders View					
	Import Feeder Identifier Data				✓	
	Manage LT Feeders		✓		✓	
	Manage LT Feeders View				✓	
Load Flow Analysis	Load Flow Analysis				✓	IESCO Supervisor (Division)
	Input	✓	✓	✓	✓	
	Input Detail	✓			✓	
	Output				✓	

IESCO SUPERVISOR (CIRCLE)

Module Name	Page Name	Add	Edit	Delete	View	Role
HT Survey	HT Survey				✓	IESCO Supervisor (Circle)
	HT Survey Pole Data	✓	✓	✓	✓	
	HT Survey View					
	HT Survey Edit		✓			
	HT Survey Equipment		✓	✓		
	HT Survey Equipment Details				✓	
	HT Survey Equipment Edit		✓			
	Shift Equipment	✓	✓		✓	
	HT Manual Section	✓	✓		✓	
LT Survey	LT Survey				✓	IESCO Supervisor (Circle)
	LT Survey Pole Data	✓	✓	✓	✓	
	LT Survey View					
	LT Survey Edit		✓			
	LT Survey Equipment					
	LT Survey Equipment Details					
	LT Survey Consumer Edit		✓			
	LT Survey Consumer Details					
	LT Survey Consumer View		✓			
	LT Survey Consumer Bends	✓	✓	✓	✓	
	LT Manual Section	✓	✓		✓	
Feeder Management	Feeder Management				✓	IESCO Supervisor (Circle)
	Manage HT Feeders		✓		✓	
	Generate Poles	✓			✓	
	Import Feeder Point Data	✓		✓	✓	
	Points Detail		✓	✓		
	Manage Feeders View					
	Import Feeder Identifier Data				✓	
	Manage LT Feeders		✓		✓	
	Manage LT Feeders View				✓	
Load Flow Analysis	Load Flow Analysis				✓	IESCO Supervisor (Circle)
	Input	✓	✓	✓	✓	
	Input Detail	✓			✓	
	Output				✓	

GIS CELL (P&E DIRECTORATE)

Module Name	Page Name	Add	Edit	Delete	View	Role
User Administration	User Administration				✓	P & E
	User	✓	✓		✓	
	Add User	✓				
	Edit User		✓			
	Associate Location To User	✓		✓		
	Designation	✓	✓	✓	✓	
	Organization	✓	✓	✓	✓	
	Role Rights	✓			✓	
	Reset Password	✓				
HT Survey	HT Survey				✓	P & E
	HT Survey Pole Data	✓	✓	✓	✓	
	HT Survey View					
	HT Survey Edit		✓			
	HT Survey Equipment		✓	✓		
	HT Survey Equipment Details				✓	
	HT Survey Equipment Edit		✓			
	Shift Equipment	✓	✓		✓	
	HT Manual Section	✓	✓		✓	
LT Survey	LT Survey				✓	P & E
	LT Survey Pole Data	✓	✓	✓	✓	
	LT Survey View					
	LT Survey Edit		✓			
	LT Survey Equipment					
	LT Survey Equipment Details					
	LT Survey Consumer Edit		✓			
	LT Survey Consumer Details					
	LT Survey Consumer View		✓			
	LT Survey Consumer Bends	✓	✓	✓	✓	
	LT Manual Section	✓	✓		✓	
Reports	Reports				✓	P & E
	Feeder Summary				✓	
	HT Report				✓	
	LT Consumer Detail				✓	
	LT Consumer Count				✓	
	View Report				✓	
	HT Survey Summary				✓	
	NEPRA				✓	
	LT Survey Summary				✓	
	Pole To Pole Distance Report				✓	

Module Name	Page Name	Add	Edit	Delete	View	Role
Feeder Management	Feeder Management				✓	P & E
	Manage HT Feeders		✓		✓	
	Generate Poles	✓			✓	
	Import Feeder Point Data	✓		✓	✓	
	Points Detail		✓	✓		
	Manage Feeders View					
	Import Feeder Identifier Data				✓	
	Manage LT Feeders		✓		✓	
	Manage LT Feeders View				✓	
Reference Data	Reference Data				✓	P & E
	Ref Circle	✓	✓	✓	✓	
	Ref Division	✓	✓	✓	✓	
	Ref Sub Division	✓	✓	✓	✓	
	Ref Sub Station	✓	✓	✓	✓	
	Ref Feeder	✓	✓	✓	✓	
	Ref Phases	✓	✓	✓	✓	
	Ref Pole Classes	✓	✓	✓	✓	
	Ref Cross Arm Types	✓	✓	✓	✓	
	Ref Pole End Types	✓	✓	✓	✓	
	Ref Conductors	✓	✓	✓	✓	
	Ref Equipment Statuses	✓	✓	✓	✓	
	Ref Pole Heights	✓	✓	✓	✓	
	Ref Pole Type	✓	✓	✓	✓	
	Ref Use Type	✓	✓	✓	✓	
	Ref Manufacturers	✓	✓	✓	✓	
	Ref Mountings	✓	✓	✓	✓	
	Ref Tariff Codes	✓	✓	✓	✓	
	Ref Equipment Type	✓	✓	✓	✓	
	Substation Transformer	✓	✓	✓	✓	
Load Flow Analysis	Load Flow Analysis				✓	P & E
	Input	✓	✓	✓	✓	
	Input Detail	✓			✓	
	Output				✓	

ANNEXURE-D

Referred to in Para 2.1 & 2.2
of CP-Code-4 Disconnection and Reconnection
of Permanent Disconnection Procedure

CP Form-16 of 156

ISLAMABAD ELECTRIC SUPPLY COMPANY LIMITED

DISCONNECTION ORDER
(TO REMOVE EQUIPMENT)

No:
Name
Address

Issue Date

Billing Month:

Batch No.	Account Number	Tariff	Amount of Bill not Paid	Surcharge	Amount Due

Reconnection Fee will have to paid separately for Reconnection
as per Standing Instructions in addition to above

Asstt: Mgr: (CS) / Asstt: Mgr: (O)

Action Taken By	Action Date	Material Return Note No.	Date
TL Nos.			
Meter Nos.			
Readings			
Condition of Meter			

Remarks and Signature of Line Superintendent (D&R)

It is certified that the equipment has been removed in GIS database from Pole ID No. _____Dated _____

Signature _____
Line Superintendent / GIS Inspector

Forwarding Address

Asstt: Mgr: (CS) / Asstt: Mgr: (O)

(Referred to in para 2 of CP-Code-07 CP-Form-23 of 156

ISLAMABAD ELECTRIC SUPPLY COMPANY LIMITED

METER CHANGE ORDER

(REFERRED TO IN PARA 2 OF CP-CODE-07 DISCONNECTION AND RECONNECTION SECTION METER CHANGE (VOL-II, 4TH EDITION)

Name of Office / Sub-Division

MCO No.
Issue Date _____

Reference No. _____ Batch No. _____

Consumer's Name _____

Address _____

Reason for Change _____

To,

Line Superintendent
Please Change Meter (s) on premises of above consumer and report below.

Signature of AMO _____

Name _____

Dated _____

METER REMOVED REPORT

Meter ID	Set No.	Meter No.	Loc Code	Mnfg Code	Meter Code	Multiplying Factor	Meter Range	Final Meter
KWH / KVARH / MDI								
KWH / KVARH / MDI								
KWH / KVARH / MDI								
KWH / KVARH / MDI								

METER INSTALLED

Meter ID	Set No.	Meter No.	Multiplying Factor	Meter Range	Final Reading	Advance Units	R.Comp Code
KWH / KVARH / MDI							
KWH / KVARH / MDI							
KWH / KVARH / MDI							
KWH / KVARH / MDI							

Store Requisition No. _____ Date _____
Item No. of CP-Form-78 (Register of Meters born on T&P) _____
Item No. of CP-Form-79 (Register of Meters returned from work to T&P Meter Subsidary Store or Meter testing room) _____
Change by _____ Signature _____ Execution Date _____ Time _____
(Name & Designation)

Meter Card / Cards has/have been duly completed by me and handed over to the consumer or his representative Mr. _____

Signature of Consumer _____ Signature of Line Superintendent _____
Name _____ Date _____ Name _____ Date _____

It is certified that the equipment has been updated in GIS database vide ID No. _____ Dated _____

Signature _____
(LS-II/GIS Inspector)

CHARGE

(In accordance with item 2 of the schedule of general charges , if the meter has been removed or had its position changed at the request of the consumer. The consumer shall be charged at the rate applicable at the time of change).

(CP-Form-18 of 154

ISLAMABAD ELECTRIC SUPPLY COMPANY LIMITED
POWER WING

Copy 3

SUB-DIVISON COPY APPLICATION FOR ELECTRICITY RECONNECTION

Date _____ Serial No _____

Name_____ Account No. _____

Address _____

To _____ Date_____

AMO _____ Sub-Division

Please reconnect the electricity supply at above premises which was disconnected on _____ vide ERO No. _____ dated _____ as all outstanding accounts have now been paid.

Signature and Stamp of Asstt: Manager (CS)

Application Number and Year	Division	Sub-Divison	Feeder	Account Number

Arrears Paid _____
Reconnection Fee Paid _____
Total Amount _____
Signature of Commercial Superintendent _____

Reconnection Order
Sub-Division Copy

Signature and Stamp of Asstt: Manager (CS)

To Date _____

Supervisor, Reconnection Section
The reconnection of above supply is authorized

To be completed by Line Superintendent

Signature and Stamp of Asstt: Manager

Date of Reconnection _____
Meter Number _____
Reading _____
Condition of Meter _____
Reconnection made by _____
Signature of Line Supdt. _____

It is certified that the equipment has been added in GIS database vide ID No. _____Dated _____

Signature _____
(LS-II/GIS Inspector)

Cp Form -08of 156
Referred To In Para 9.2
Code –CP-02 New Connection & Change Of Name Etc.
(Vol. II, 6th Edition)

Islamabad Electric Supply Company Limited

Service Connection Order

(UP TO 40 KW)

Name of Sub-Division ..... SCO No. _____ Date _____

1. Application No. _____ Date _____ FATA/PATA/URBAN/RURAL
2. Account No _____ Feeder No _____ Batch _____
3. Name & Father /Husband Name _____
4. Address _____
5. Service Connection Cost D.N.No. _____ Date _____
6. Security Deposit D.N.Do. _____ Date _____
7. Date of Payment Of Service Connection Cost _____ _____
8. Amount Of Security Deposit _____ Date Of Payment _____
9. F.Govt /Autonomous and Local Bodies under Prov.Govt. _____ _____
10. Cantonment Board _____ _____
11. prov. Govt /Autonomous and Local Bodies under Prov.Govt. _____ _____
12. Local Bodies _____ _____
13. Authorized By (Name) _____ Signature _____
    Designation _____
    STAMP _____
14. Store Requisition No _____ Date _____
15. Nature of Connection As Per Standard Classification
    Code Booklet _____ _____
16. Seasonal/Non Seasonal _____ Sanctioned Load _____
17. No. of Meter s _____ No. Of A.C .S/Centrally Air Conditioned Code _____
18. Meter I.D
19. Meter Number
20. Location Code _____ _____
21. Meter Code
22. Manufacture Code
23. Multiplying Factor
24. Meter Range _____ _____
25. Meter Reading
26. Date Of Connection CP-78 Item No.
27. Meter Rent Service Rent Tie Up/Non Tie Up
28. Signature of Consumer In Token Of Installation of Connection. _____
29. Signature of Consumer In Token Of Receipt of Meter Reading Card. _____
30. Seal on the Meter _____
31. Seal on the Box _____
32. Security Slip/Prize Bond No. _____
33. Signatures

Connection Installed By:

Signature _____
(Line Supdt.)

Checked By SDO

Signature _____
(Sub Divisional Officer)

Updated in GIS By:

It is certified that the equipment has been added in GIS database vide ID No. _____ Dated _____

Signature _____
(LS-II/GIS Inspector)

COMPLETION REPORT (A-90)

Name of HT Proposal_____ Work Order No. & Date_____
Operation Circle_____ Operation Division_____ Operation S/Div_____
Construction Division_____ Construction S/Div_____ Date of Completion_____

Sr. No.	MATERIAL	UNIT	Quantity				
			As per W/O	Issued	Actual Installed	Variation From	
						W/O	Issued
1	2	3	4	5	6	7=4-6	8=5-6
A. NEW WORK							
1	**PC/SPUN POLES**						
	31 FEET	NO.					
	36 FEET	NO.					
	40 FEET	NO.					
	45 FEET	NO.					
	55 FEET	NO.					
2	**LATICE STEEL STRUCTURES**						
	31 FEET	NO.					
	36 FEET	NO.					
	40 FEET	NO.					
	45 FEET	NO.					
	55 FEET	NO.					
3	**WOODEN/STEEL CROSS ARM**						
	11 KV WOODEN	NO.					
	11 KV STEEL	NO.					
4	**INSULATORS**						
	11 KV PIN TYPE	NO.					
	11 KV DISC TYPE	NO.					
	L.T. SPOOL TYPE	NO.					
5	**PINS**						
	11 KV INSULATOR PINS	NO.					
6	**CROSS ARM BRACES**						
	11 KV KNEE BRACE	NO.					
	11 KV STEP BRACE	NO.					
7	**NEW HT LINE**						
	GOPHER	KM.					
	RABBIT	KM.					
	DOG	KM.					
	LYNX	KM.					
	PANTHER	KM.					
	OSPREY	KM.					
8	**RECONDUCTORING OF HT LINE WITH**						
	GOPHER	KM.					
	RABBIT	KM.					
	DOG	KM.					
	LYNX	KM.					
	PANTHER	KM.					
	OSPREY	KM.					
9	**AAC CONDUCTOR**						
	GNAT	KM.					
	ANT	KM.					
	WASP	KM.					
10	ALUMINIUM TIE WIRE	M					
11	STAY RODS COMPLETE SET WITH ANCHOR ASSEMBLY	NO.					
12	STAY WIRE (10MM, 7/3,22)	KG					
13	EYE NUT	NO.					
14	EARTHING SETS COMPLETE	NO.					
15	DANGER PLATES	NO.					
16	BARBED WIRE	KG					

17	**BOLT AND NUTS**					
	3/8 " X 2"	NO.				
	3/8 " X 6"	NO.				
	3/8 " X 14"	NO.				
	1/2 " X 2"	NO.				
	1/2 " X 6"	NO.				
	5/8 " X 1-1/2 "	NO.				
	5/8 X 2 "	NO.				
	5/8 X 8"	NO.				
	5/8 X 9 "	NO.				
	5/8 X 10"	NO.				
	5/8 X 6 "	NO.				
	5/8 X 12"	NO.				
	5/8 X 14 "	NO.				
	5/8 X 18 "	NO.				
	5/8 X 16 "	NO.				
18	**DOUBLE ARMING BOLTS**					
	5/8 X 12"	NO.				
	5/8 X 14"	NO.				
	5/8 X 18"	NO.				
	5/8 X 20"	NO.				
	5/8 X 22"	NO.				
	5/8 X 16"	NO.				
19	**WASHERS**					
	7/16 X 1 " (ROUND)					
	9/16 X 1 " (ROUND)					
	9/16 X 1-1/4 " (ROUND)					
	11/16 " X 2-1/4 " 2-1/4 (SQUARE)					
20	**PG CONNECTORS**					
	T-116	NO.				
	T-117	NO.				
	T-150	NO.				
	S-157	NO.				
	T-155	NO.				
21	**CLAMPS**					
	0.4 KV LOOP DEADEND FOR LT STR & PC	NO.				
	11 KV DEAD END	NO.				
	GROUNDING CONDUCTOR CLAMPS	NO.				
	SUSPENSION ANGLE CLAMPS	NO.				
22	D-SHACKLE + COTTER PINS	NO.				
23	ANCHOR SHACKLE	NO.				
24	**RELOCATION OF EXISTING T/F (11/0.415KV)**					
	200 KVA	NO.				
	100 KVA	NO.				
	50 KVA	NO.				
	25 KVA	NO.				
25	**PLATFORMS FOR T/F**					
	DOUBLE POLE	NO.				
	SINGLE POLE	NO.				
26	**DROPOUT CUTOUT (SET OF 3)**					
	11 KV	NO.				
27	11 KV ANGLE IRON BRACKETS	NO.				
28	**HT CAPACITOR (FIXED)**					
	RELOCATION OF EXISTING CAP					
	NEW CAP					

29	**FOUNDATION OF LATTICE STEEL STRUCTURE**						
	31 FEET	NO.					
	36 FEET	NO.					
	40 FEET	NO.					
	45 FEET	NO.					
	55 FEET	NO.					
30	**LIGHTENING ARRESTORES (SET OF 3)**						
	11 KV	NO.					

Sr. No.	Description	Unit	Material Quantity		
			As per B.O.Q	As per MRN	Variations
1	2	3	4	5	6 = 4 - 5
B	**MATERIAL DISMANTLED & RETURNED TO STORE**				
1	Steel Structure 45'	EA			
2	Steel Structure 40'	EA			
3	H.T STR 36'	EA			
4	H.T P.C.C Poles 40'	EA			
5	H.T P.C.C Poles 36'	EA			
6	L.T STR 31'	EA			
7	L.T P.C Pole 31'	EA			
8	Danger Plate	EA			
9	Anti Climbing Device	EA			
10	X - Arms 11 kV Wood	EA			
11	X - Arms 11 kV Steel	EA			
12	Knee Braces	EA			
13	Step Braces	EA			
14	Pin Insulators	EA			
15	Disc Insulators	EA			
16	Spool Insulator	EA			
17	Insulator Pins	EA			
18	D-Strap	EA			
19	Dead End Clamp for Osp, Pan, Lynx	EA			
20	Dead End Clamp for Dog, Rab	EA			
21	Loop Dead End Clamp	EA			
22	Eye Nut	EA			
23	Double Arming Bolt	EA			
24	Anchor Shackles	EA			
25	P.G Connectors for Osp, Pan, Lynx	EA			
26	P.G Connectors for Dog, Rab	EA			
27	P.G Connector for Wasp	EA			
28	P.G Connector for Ant	EA			
29	Nut & Bolts 3 / 8 x 6"	EA			
30	Nut & Bolts 5 / 8 x 2"	EA			
31	Nut & Bolts 5 / 8 x 10"	EA			
32	Nut & Bolts 5 / 8 x 14"	EA			
33	Round Warshers	EA			
34	Square Warshers	EA			
35	Stay Assembly	EA			
36	STAY Wire	KG			
37	MS Clamps	EA			
38	Tie Wire	KG			
39	Earthing Unit	EA			
40	ACSR Osprey	MR			
41	ACSR Lynx	MR			
42	ACSR Dog	MR			
43	ACSR Rabbit	MR			

Sr. No.	Description	Unit	Material Quantity		
			As per B.O.Q	As per MRN	Variations
1	2	3	4	5	6 = 4 - 5
44	AAC Wasp	MR			
45	AAC Ant	MR			
46	S/C 500 MCM Cable	MR			
47	3/Core 4-AWG Cable	MR			
48	4/C 37/.083 Cable	MR			
49	4/C 19/.083 Cable	MR			
50	Drop Out Cut Out	Set			
51	Plateform Double Structure	EA			
50	Drop Out Cut Out	Set			
52	Plateform Double Structure	EA			

C **S.Rs Nos. & Date**

a) b) c)

d) e) f)

D **MRNs Nos. & Date**

a) b) c)

d) e) f)

E **Estimated Cost of the Proposal** Rs._____

F **Actual Expenditure** Rs._____

G **Attachments:**

Copies of S.Rs ☐ Copies of M.R.Ns ☐

Handing/Taking Over Papers ☐ A-90 ☐

As Built Drawing/Sketch ☐ GIS Map ☐

E.B. Form C.S.-18 W.P.P., Lahore Job No. 85/2001

PAKISTAN
WATER AND POWER DEVELOPMENT AUTHORITY
ELECTRICITY DEPARTMENT

OFFICE .....

No. 005700

SUNDRY JOBS ORDER

To
Line Superintendent,

Please execute the following work and on completion report below:

Description of work

Estimate No.....

Name of work .....

Allocation .....

..... Sub Divisional Officer .....Date .....

.....

Report.

Date started ..... Date finished

Performed by .....

"Meter card/cards has/have been duly completed by me and kept with the meter/meters in the presence of consumer of his representative Mr……. on date……."

..... (Consumer's Signature)*

.....Line Superintender / GIS Inspector Date .....

.....

Charge.

Above charge entered in sundry charges and allowances register. (If charge in to be recovered from consumer).

By.....Sub Divisional Clerk .....Date.....

.....

If work is on account of consumer.