PBS INSTRUCTION 100-59/ PBS INSTRUCTION 300-60

ENGINEERING & OPERATIONS RECORD UPDATE PROCESS

# BANGLADESH RURAL ELECTRIFICATION BOARD PBS INSTRUCTION 100-59/ PBS INSTRUCTION 300-60

Approval Date: 31/10/2005 Revision Date: 19/02/2020

SUBJECT: ENGINEERING & OPERATIONS RECORD UPDATE PROCESS

#### I. Background

Due to the continuing growth of consumers, both in number and in per capacity KWH consumption, the electrical network system in the PBSs are continuously changing. In addition of new laterals, new transformer are installed, old transformer are replaced by higher capacity ones, single-phase lines are converted to three-phase, lines are upgraded with higher size of conductor, etc. These changes must be accurately noted in a timely manner for PBS to operate at satisfactory levels of efficiency and reliability. If the records are not kept accurate and up-to-date, consumers cannot be assured power supply with satisfactory levels of quality and reliability. Without accurate Engineering and Operations (E&O) records, operational efficiency of the PBS is sure to decrease. Therefore a systematic process of continuous updating of E&O records must be followed at the PBS level. This instruction will detail how that process should be implemented.

#### II. Purpose:

To establish standard procedure for updating equipment data in electronic format, which will be helpful to find out, manufacture wise or equipment wise its quality, loaded condition, maintenance time etc. For this purpose a software known as ERC (Equipment Record Card) Software has been using in PBS system.

#### III. Policy

#### (A) Availability of ERC (Equipment Record Card) Software:

Senior General Manager/ General Manager of PBS will select one Junior Engineer, as a

		ON 100-59/ PBS INSTR OPERATIONS RECORD		
Date of Origin	Reviewed by	Approved by	Page No.	Revision No.
31/10/2005	BREB	BREB Board	Page 1 of 37	2

Mozibur Rahman)

Consultant TAPP BREP

(Md. Duhidun slam) Consultant

(Md. Mozammel Huq) onsultant TAPP BREE

Junior Engineer (ERC). Junior Engineer (ERC) will maintain transformer and other equipment record information in computer with ERC software, alone or with the help of consultant (if there is contract with consultant). ERC software is specially developed for this purpose. ICT Directorate of BREB will make this software available for the PBSs. The equipment will be inspected as per guidelines of PBS instructions 100-29 and 100-30. Subsequently the data will be input from respective inspection forms into the ERC software (or into equipment record cards prior to the availability of ERC software).

#### (B) Responsibility of maintaining ERC Update

The primary oversight responsibility to assure compliance to the guideline by the PBS Instruction 100-59 shall over all lie with the Office of the Superintending Engineer, GIS. However, at the field level GIS activities of PBS will be monitored by Zonal Superintending Engineer and Executive Engineer. They will report on follow up of ERC activities to the Superintending Engineer, GIS Upon necessary and request of the Office of the Superintending Engineer, GIS will be assisted in technical matters by ICT Directorate. Training Directorate will conduct training for manpower development on ERC updating process and system study including load flow study in cooperation with Office of the Superintending Engineer, GIS and ICT Directorate.

#### (C) Updating of ERC and Specific responsibility at PBS level

For the purpose of updating ERC and fixing up specific responsibility at PBS level, this instruction is divided into five several Parts. They are as follows-

Part-1: Equipment (Transformer, VR, ACR/ OCR/ OCB etc.) Record Update;

Part-2: Update of Operational Diagram and Maps;

Part-3: Substation and Network System O&M Record Update;

Part-4: Operating Responsibilities for Data Flow and Record Updating;

Part-5: Reporting on Data/ Record Update Progress.

To accurately keep the E&O (Engineering and Operational) records up-to-date, it is

		ON 100-59/ PBS INSTR OPERATIONS RECORI		
Date of Origin	Reviewed by	Approved by	Page No.	Revision No.
31/10/2005	BREB	BREB Board	Page 2 of 37	2

(Md. Mozibur Rahman) ensultant TADD RREP

Ansanul Haque

Consultant TAPP BREB

(Md. Duffidul Islam) Consultant TARP

(Md. Mo. ammel Huq) Consultant TAPP. BREB onsultant TAPP RREE

(Md Abdul Khaleque)

krabortty Debasish Cl BREB

mandatory that the pole in the field have the correct pole number physically placed on the pole. The pole should be numbered according to the up-to-date and corrected operational diagram and detail maps. PBSs will therefore need to adopt necessary measures to maintain correct numbers physically on the poles in the field.

Note: Prior to physically placing pole numbers on the poles in the field, it is very important that Retainer Engineer of the consultant assure the operational diagram and details maps 100% accurate and up-to-date according to actual power lines in the field.

For ease of updating, the operational diagram and maps shall be maintained in digital format in the computer by the consultants.

#### Part-1: Equipment (Transformer, VR, ACR/ OCR/ OCB etc.) Record Update

#### 1.01 Scope

This part of the instruction presents guideline for ongoing update of Equipment (Transformer, VR, ACR/ OCR/ OCB etc.) data as changes take place in the PBS system. This instruction is intended to provide guidance in the following manner:

- To assist the PBS store Keeper to record accurate data on issued equipment;
- To assist the PBS O&M personnel to collect accurate field data pertaining to installed or removed equipment;
- To assist the PBS personnel to collect connected consumer data in the prescribed format. The above data can be collected by PBS personnel or by retainer contract with consultant. Collected data shall be submitted DGM(Tech-HQ) or AGM(E&C/O&M). He/ She will handover data to Junior Engineer (ERC) or consultant. Junior Engineer (ERC) or consultant shall enter data into ERC software.

#### 1.02 Use of Forms

	<b>BANGLADESH F</b>	RURAL ELECTRIFIC	CATION BOARD	
		ON 100-59/ PBS INSTR OPERATIONS RECORI		
Date of Origin	Reviewed by	Approved by	Page No.	Revision No.
31/10/2005	BREB	BREB Board	Page 3 of 37	2
evision Date: 01/09	9/2013 & 19/02/2020	0_	0.04-	
Md Mozibur Rahman)	(Md Duhidul Islam)	(Md. Mozammel Hug onsultant TAPP RRI	(Md. Abdul Khaleque Consultant TAPP BR	ie)

(Md. Ahsanul Haque) Consultant TAPP BRED

(Debasish Chakrabortty PD, TAPP) BREB ২১ তম বোর্ড সভায় অনুমোদিত সিদ্ধান্ত নং ১৭৭০০

Asst. Secy. (Board), BREB.

To facilitate data recording at field level and passing-on this data to the Junior Engineer (ERC) or consultant necessary forms will be used in the manner as stated in the following table. PBS will have these forms printed as per sample of Form 100-59-01, Form 100-59-02 and Form 100-59-03 provided in this document.

Name of Form	Purpose of Use	Used by	Copy needed	Copy distribution list
Equipment Issue Record (Form No. 100-59-01)	For Recording Nameplate Data of issued each equipment	PBS HQ Store	3 Copies.	1 Copy: DGM(Tech-HQ)/ AGM(O&M) 1 Copy: Recipient of Equipment 1 Copy: Store Record
Equipment Installed Record (Form No. 100-59-02)	For Recording pole location of the equipment being installed	PBS HQ, ZO, Sub-ZO, Area Office Complain center, Contractor	3 Copies.	1 Copy: DGM(Tech-HQ)/ AGM(O&M) 1 Copy: O&M section 1 Copy: as record of Contractor/ PBS lineman
Equipment Removal Record (Form No. 100-59-03)	For Recording pole location, serial no. of equipment being removed	PBS HQ, ZO, Sub-ZO, Area Office Complain center, Contractor	4 Copies.	1 Copy: DGM(Tech-HQ)/AGM(O&M) 1 Copy: O&M section 1 Copy: as record of Contractor/ PBS lineman 1 Copy: Store Keeper

# 1.02.01: Equipment Issued From Store

- When Storekeeper issues equipment to Contractor, PBS Headquarter, Zonal Office, he/ she record equipment Nameplate information on an equipment Issue Record (Form No. 100-59-01) and send 1 copy to this to AGM(O&M) for forwarding to DGM(Tech-HQ).
- 2. Junior Engineer(ERC) or Consultant will input the Equipment Data into ERC Software which will establish an Equipment Card (Soft Copy) in the ERC Software.

8	BANGLADESH F	RURAL ELECTRIFIC	CATION BOARD	
		ON 100-59/ PBS INSTR OPERATIONS RECORI		W
Date of Origin	Reviewed by	Approved by	Page No.	Revision No.
31/10/2005	BREB	BREB Board	Page 4 of 37	2

(Md. Mozibur Rahman)

(Md. Mozavimel Huq),
(Md. Duhidul Islam)onsultant (APP RPEM)
Consultant TAPP BREI

(Debasish Charrabortty)

(Kamrul Ahsan Mollik) Asst. Secy. (Board), BREB.

(Md. Ansanul Haque)

onty) P He/ She will then send this copy with a seal "Recorded in ERC" to DGM(Tech-HQ)/ AGM(O&M) for counter sign & back to Junior Engineer(ERC) for preserve.

### 1.02.02: Equipment Installed in the field

- When PBS or Contractor Crew installs equipment, they will fill out an Equipment Installation Record (Form No. 100-59-02) and send it to the AGM(O&M) of concern office (Zonal office or Headquarter).
- 2. AGM(O&M) will check the Equipment Installation Record for accuracy and completeness of data and will forward this Form to DGM (Tech-HQ).
- 3. When project contractor installs Equipment, Consultant will ensure that project contractor fills out all equipment data on page-2 of BREB Form no. 459 (Sample enclosed) in accordance with PBS instruction no. 100-20. Consultant will keep a copy of this form before forwarding it to Executive Engineer of concerned Construction and Operation Division certifying the equipment is ready for energization.
- 4. RE of consultant (if contracted) will fill out on the Equipment Card with location (complete pole number) and Customer information (if any) and will entry this data into ERC Software if the consultant is contracted for ERC data entry. After data entry or without data entry (if it is not responsibility of consultant as per contract), he/ she will send this copy to DGM(Tech-HQ) or AGM(O&M). DGM(Tech-HQ) or AGM(O&M) send it to Junior Engineer (ERC). Junior Engineer (ERC) will input the Equipment Data into ERC Software. Then he/ she will send with a seal "Recorded in ERC" to DGM (Tech-HQ) or AGM(O&M) for counter sign and back to Junior Engineer(ERC) for preserve. If there is no contract with consultant for ERC data entry, PBS personnel will collect all necessary data.

# 1.02.03: Consumer Provided with Service Connection or Disconnection

		ON 100-59/ PBS INSTR OPERATIONS RECORD		
Date of Origin	Reviewed by	Approved by	Page No.	Revision No.
31/10/2005	BREB	BREB Board	Page 5 of 37	2

(Md. Mozibur Rahman) Consultant TADD DRED (Md. Duhidul Islam) Consultant TAPP BRE (Md. Mozemmel Huq) (Md. Abdul Khaleque) onsultant TAPP REE Consultant TAPP, BREB

৬২১ তম ব্যের্ড সম্ভায় অনুমোদিছ সিদ্ধান্ত নং ১ ৭ ৭ ৫৮

(Md. Ahsanul Haque) Consultant TAPP BREP (Debasish Chakrabortty)

 Field Crew while installing or removing the meter will note all the required information on CMO including the Transformer Pole Number and connected phase, then route completed CMO to the AGM(O&M).

Note-1: CMO Forms will be printed with space to enter Transformer Serial Number and Transformer Pole Number at the bottom of the Form. All CMOs to install or remove meters will be rubber stamped by billing section with a space to enter Transformer Serial Number and Transformer Pole Number until modified CMO Forms are printed.

**Note-2:** Any disconnection for non-payment, the billing section shall prepare CMO to record the disconnection.

- AGM(O&M) will check CMO for accuracy and completeness of data and will
  forward a copy of the CMO to the Junior Engineer(ERC) or consultant to input data
  into ERC Software.
- 3. When PBS or Contractor Crew installs equipment, they will fill out an Equipment Installation Record (Form No. 100-59-02) and send it to the AGM(O&M) of concern office (Zonal office or Headquarter).

# 1.02.04: Equipment Failure in the field

- When Equipment is damage, the field crew or consultant (if there is contract with consultant) will change out the equipment and fill out an Equipment Removal Form (Form No. 100-59-03) for the removed equipment will be routed to AGM(O&M).
- 2. AGM(O&M) will check Equipment Removal Record for accuracy and touted to the Junior Engineer(ERC) or Consultant (if there is contract with consultant). AGM(O&M) will retain one copy of Equipment Removal Form. This copy of the form will accompany the failed Equipment to the PBS workshop.
- 3. Damaged Equipment will be sent to the PBS Storekeeper with a copy of the Equipment Removal Form (Form No. 100-59-03) that was filled out when

	BANGLADESH F	RURAL ELECTRIFIC	CATION BOARD	
		ON 100-59/ PBS INSTR OPERATIONS RECORD		
Date of Origin	Reviewed by	Approved by	Page No.	Revision No.
31/10/2005	BREB	BREB Board	Page 6 of 37	2

(Md. Mozibur Rahman)

Consultant TAPP BREP

(Md Duhidul Islam)
onsuitant TAPP BRE

(Debasieri Chakrabortty)

PD TAPP BRER

(Md. Mozammei Huqionsultant TAPP. BREP

৬২১ তম বোর্ড সভায় অনুমোদিত প্রিদ্ধান্ত নং ১৭৭০৫

- Equipment was removed.
- 4. Storekeeper will inform to AGM(O&M) about damaged equipment. AGM(O&M) will determine whether the damaged equipment is repairable with PBS workshop personnel.
- 5. AGM(O&M) will check to ensure that consumer data and pole number of the removed equipment is correctly recorded by the replacement equipment and he/ she will update single line operational diagram. RE will update by his/ her personnel (if contracted), otherwise send to Junior Engineer (ERC) for updating ERC software.

# 1.02.05: When the Damage Equipment CAN NOT be replaced

- 1. Storekeeper and/ or PBS workshop personnel will determine that the Damaged Equipment is to be junked and will follow all current procedures for this action as per PBS instruction 300-52. In addition, Storekeeper will write on the copy of Equipment Removal Record that was sent by Head Quarter/ Zonal Office, with the removed Equipment that the Equipment will be Junked and will send this form to AGM(O&M) who will in turn forward this Form to junior Engineer (ERC) or Consultant.
- 2. Junior Engineer (ERC) or Consultant will note the Equipment Record in the ERC Software that the equipment is "Junked" and will lock this data for READ ONLY.

# 1.02.06: When the Damage Equipment is REPAIRABLE

PO TAPP BREB

onsultant TAPP BREB

- 1. PBS workshop will repair the damage equipment using all current procedure. In addition the equipment repair shop will paint XXR on the equipment to denote a repaired equipment. Equipment repair shop will forward equipment along with the Material Return Voucher, to the Store Keeper.
- 2. PBS workshop will also paint the equipment serial number on the lower portion of

	DANCI ADECH I	RURAL ELECTRIFIC	CATION BOARD	
	PBS INSTRUCTI	ON 100-59/ PBS INSTR OPERATIONS RECORI	RUCTION 300-60:	
Date of Origin	Reviewed by	Approved by	Page No.	Revision No.
31/10/2005	BREB	BREB Board	Page 7 of 37	2
Revision Date: 01/09	9/2013 & 19/02/2020	9	0.000	
(Md. Mozibut Rahman)	(Md. Duhidul Islan	(Md. Myzammei Huq Consultant TAPP RRI ৬২১ তম বোর্ড	(Md. Abdul Khaleque Consultant TAPP. BR	EB
(Md. Ansanul Haque)	(Debasish Chakrabo	rtty)	(Kamrul Ahsan	Mollik)

(Kamrul Ahsan Mollik)

- the equipment body in 2 (two) inches black letters, placed 1(one) inch above the bottom of the equipment body, and centered opposite to the equipment hanger brackets (for transformer, line VR, line ACR/ OCR/ OCB).
- Storekeeper while issuing the repaired equipment will fill out Equipment Issue Card using the original Equipment Serial No. and will add the suffix XXR on the Issue Card. Storekeeper will send a copy of the Equipment Issue Card to Junior Engineer(ERC).
- 4. Junior Engineer (ERC) will note "Repaired" on the comments of the existing Equipment Record in ERC Software and will lock this record to READ ONLY. This will allow the original equipment to be retained in the ERC database for future reports, such as the number of failures by manufacture etc. Junior Engineer (ERC) will then create a new Equipment Record Card by inputting the Equipment Nameplate data to the ERC Software and use the original Equipment Serial Number plus the suffix XXR. This will allow the repaired equipment to be tracked and reported as a repaired equipment.

### 1.02.07: Equipment already installed before introduction ERC Software

- 1. AGM(O&M) will collect the previous Equipment Cards BREB Form 264 if they were filled up in due time properly. And verify the data is complete, up-to-date and correct. He/ She then send only those cards to Junior Engineer (ERC) which contains complete up-to-date and correct data.
- 2. Junior Engineer (ERC) or Consultant (if there is contract with consultant) will input data from Equipment Cards into ERC Software.
- 3. Junior Engineer (ERC) will also identify from updated operational diagram and maps, which equipment cards are missing and make a list of such equipment with pole numbers and submit the list to the Senior General Manager/ General Manager. Senior General Manager/General Manager shall develop a plan for doing the work of

		ON 100-59/ PBS INSTE		
Date of Origin	Reviewed by	Approved by	Page No.	Revision No.
31/10/2005	BREB	BREB Board	Page 8 of 37	2

(Md. Mozibur Rahman) Insultant TAPP BREB

Consultant TAPP, BREB

(Md. Duhidul Islam) onsultant TAPP RRE (Md. Arisanul Haque)

(Debasish Chakrabortty)

PD TAPP BREB

(Md. Mozemmer Huq)

(Md Abdul Khaleque)

৬২১ তম বোর্ড সভায় অনুমোদিত সিদ্ধান্ত নং ১৭৭০০

(Kamrul Al Asst. Secy. (Board), BREB. data collection with PBS personnel.

4. Upon approval of Senior General Manager/ General Manager, PBS Personnel or Consultant Personnel will collect data in a format as BREB Form No. 100-59-07 from field and Junior Engineer (ERC) will check for correctness of the data before input into the ERC Software.

Note:- Annexure-A for work/ data flow chart for equipment record update is enclosed.

#### Part-2: UPDATE OF OPERATIONAL DIAGRAM AND MAPS

#### 2.01 Scope

This part of the instruction presents guideline for systematic update of operational diagram and maps (System Key Map and Detail Maps) of electrical network system of PBS. It is intended to provide guidance for the PBS personnel and for the RE of the consultant, who shall ensure monthly update of operational diagram and maps.

Note:- The RE only prints current copies of the operational diagram annually, unless requested more frequently by the Senior General Manager/ General Manager. However, the operational original diagram and ma

### 2.02 Use of Computer

For the ease of updating, the consultant provide necessary computer hardware, software and manpower support at the PBS level, so that computerized operational diagram and system maps are maintained in AutoCAD or any other similar software, such as AutoDesk, AutoCivil, NetCAD, GIS etc. as per the Retainer Contract. Director(SE&D) of BREB will ensure the consultants comply with computerization of operational diagram and system maps in timely manner. That means storing and

	BANGLADESH F	RURAL ELECTRIFI	CATION BOARD	
		ON 100-59/ PBS INSTE		
	ENGINEERING AND	OPERATIONS RECOR	D UPDATE PROCESS	
Date of Origin	Reviewed by	Approved by	Page No.	Revision No.
31/10/2005	BREB	BREB Board	Page 9 of 37	2

Md. Mozibur Rahman)
onsultant TAPP BREB

(Md. Duhidul Islam) onsultant TAPP BRE (Md. Myzammel Huq) onsultant TAPP RREI (Md. Abdul Khaleque)

৬২১ **তম বোর্ড সভায় অনুমোদিত সিদ্ধান্ত** নং ১৭৭৫

(Md. Ahsanul Haque) Consultant TAPP, BREB

(Debasish Chakrabortty)

(Kamrul Ahsan Mollik)

production/printing of operational diagram and maps will be in digital format.

# 2.03 Sequential Steps of Operational Diagram Updating

In pursuance of PBS Policy Instruction 100-09: Service Contract with Retainer Consultant for Electric Consultancy Service, Appendix-D: Engineering Services Contract, Section-A, the consultant and PBS will perform their respective portion of work as follows:

### 2.03.01: Operational Diagram and Maps

- 1. Consultant will prepare operational drawing by feeder. In this drawing, the following items shall be displayed and designated: HT Line (Section by section) including length and conductor size of the line in each section, pole number, map reference, name of location (Village, Union, Upazila), equipment (including transformer) name, point, type and rating, connected phase, number of connected consumers by classification, number of probable consumers but not connected now by classification for whom facility has been created, section point in the line, etc.
- 2. The Retainer Consultant shall develop system Key Map and Detail Maps, and update the same monthly. The update shall incorporate all planned and as-built changes, additions and alternations with appropriate legend for the electrical network system of the PBS.

Note: The RE only prints current copies of the operational diagram and maps annually, unless requested more frequently by the Senior General Manager/ General Manager. However, the digital operational diagram and maps stored on computer should be up-to-date within the past 30 days.

#### 2.03.02: Changes made in the Electrical System by Construction Division of BREB

All additions, and modifications in the system, including transformer capacity, load

		ON 100-59/ PBS INSTE OPERATIONS RECOR		
Date of Origin	Reviewed by	Approved by	Page No.	Revision No.
31/10/2005	BREB	BREB Board	Page 10 of 37	2

Md Mozibur Rahman)
'onsultant TAPP BREP

(Md. Ahsanul Haque)

Consultant TAPP, BREB

Debasish Chakrabortty) PD TAPP BREB

nsuitan

(Md Duhidul Islam)

(Md. Mozammel (Md. Abdul Khaleque) TAPP BREP onsultant TAPP

৬২১ তম বোর্ড সভায় অনুমো

information, pole location etc. done by concern construction division of BREB shall be noted by the Retainer Engineer immediately after the change. The as-built staking sheets shall be prepared immediately after final inspection.

New pole will be numbered by the Retainer Engineer. He/ She shall check and
ensure that correct pole number have been installed by BREB contractor. No
electrical line shall be accepted by the construction division of BREB unless the
pole numbered by the contractor and RE certifies the numbering is correct.

### 2.03.03: Changes made in the Electrical Network System by PBS

- All additions, and modifications in the system, including but limited to such things as connection, disconnection of service drops from transformer with their capacity, load information, pole location etc. done by PBS shall be recorded on appropriate forms, as designated in this instruction. This data shall be forwarded to the Retainer Engineer by AGM(E&C).
- 2. New pole numbers will be assigned by Retainer Engineer. AGM(E&C) shall ensure that all the new and replacement poles have been numbered by PBS contractor or PBS Lineman.

# 2.03.04: Updating Operational Diagram and Maps

1. The Retainer Engineer shall update operational single line diagram at list once each month. The update shall denote all additions and changes completed during the month. The Retainer Engineer shall submit copies of updated single line diagram to the PBS at the end of each financial year and more frequently, if requested by Senior General Manager/ General Manager. However, the digital operational diagram and maps stored on the computer should be up-to-date within the past 30 days.

Part-3: SUB-STATION AND ELECTRIC NETWORK O&M RECORDS

	BANGLADESH F	RURAL ELECTRIFI	CATION BOARD	
		ON 100-59/ PBS INSTE		
Data of Ovinin	Reviewed by	OPERATIONS RECOR Approved by	Page No.	Revision No.
Date of Origin	100000000000000000000000000000000000000			2
31/10/2005	BREB	BREB Board	Page 11 of 37	2
A STATE OF THE STA	0/2013 & 19/02/2020		E1	

(Md. Mozibur Rahman)

(Md. Ansanul Haque)

Consultant TAPP, BREB

(Md Duhidul Islam) Consuitant TARR RRE (Md. Movammel Hug)

(Md. Abdul Khaleque)

22) তম বোর্ড সভায় অনুমোদিত সিভান্ত নং ১৭৭

(Debasish Chakrabortty

#### **UPDATE**

#### 3.01 Scope

This part of the instruction presents guideline for systematic update of sub-station and electric system records of PBSs. It is intended to also provide guidance for the PBS personnel and for RE, who shall ensure update of operational diagram and system maps.

#### 3.02 List of Records:

There are two types of records are required for construction, operation and maintenance purpose. They are described below-

#### 3.02.01: Sub-Station Records

Each PBS Headquarters shall maintain a file for each substation separately. This file shall contain all pertinent information regarding the substation and the equipment installed therein.

At each PBS Headquarters, a record system shall be established to properly maintain and update records that will permit analysis of the data obtained from the substation inspection reports.

Information from each sub-station inspection report (Form No. 100-29-17) shall be show pertinent data on:

- (a) Power Transformer Bank;
- (b) Voltage Regulators;
- (c) Above 33 kV Breaker
- (d) 33 kV ACR/Breaker;
- (e) 11 kV ACR/ Breaker;

		ON 100-59/ PBS INSTE OPERATIONS RECOR	RUCTION 300-60:	
Date of Origin	Reviewed by	Approved by	Page No.	Revision No.
31/10/2005	BREB	BREB Board	Page 12 of 37	2

(Md. Mozibur Rahman)

(Md. Duhidul Islam) Consuitant TAPP BRE

(Md. Mozammel Huq)

(Md. Abdul Khaleque)
Consultant TAPP BREB

(Md. Ahsanul Haque) Consultant TAPP, BREB

(Debasish Chakrabortty)

(Kamrul Ahsan Mollik)

- (f) Feeder Loads;
- (g) Any additional data of note.

Records of substation inspection should include readings of all indicated and recorded electrical quantities, times and date, ambient weather conditions and reference to work order or job orders showing remedial work performed as a result of each inspection.

Files for each substation should include: Up-to-date operational diagram (SLD) of substation, wiring diagram, equipment and earthing layout, drawings of substation structures, manufacturer's descriptive literature, instruction books, part list and locations.

#### 3.02.02: Electrical Network Records

This listing will include most of the operating and maintenance records that will maintained in each PBS headquarters for proper operation and maintenance of the electrical network system. Other records will be added as needed:

- (a) Line inspection and maintenance records;
- (b) Voltage Regulator inspection and maintenance records;
- (c) Recloser inspection and maintenance records;
- (d) Capacitor inspection and maintenance records;
- (e) Voltage and current survey records;
- (f) Meter records;
- (g) Transformer records;
- (h) Other equipment records;
- (i) Operational Diagram and Maps.

		ON 100-59/ PBS INSTI OPERATIONS RECOR		
Date of Origin	Reviewed by	Approved by	Page No.	Revision No.
31/10/2005	BREB	BREB Board	Page 13 of 37	2

Md Mozibur Rahman)

Consultant TAPP, BREB

(Md Duhidul Islam)

Debasish Chakrabortty

D. TAPP BREB

(Md. Mozammel Hug)(Md. Abdul Khaleque)
consultant TAPP Recensultant TAPP, BREB

৬২১ তম বোর্ড সভায় অনুমোদিত সিদ্ধান্ত দং ১৭৭০০

#### 3.03 Electrical Line Maintenance Records

A map of the electrical network system shall be maintained in each PBS area. The problematic tree areas will be noted on this map so that the proper trimming cycle must be maintained. It may be necessary to trim minimum twice in each year. In some areas if adequate initial tree clearing rights were not obtained when the line was initially built, it may require to trim more than two times in a year.

PBS shall also maintain an Operational Diagram. The Operational Diagram shall identify problem areas as outlined below to provide an important too to develop an effective maintenance program:

- (a) Right of way clearing;
- (b) Over-loaded line section/ feeder;
- (c) High interruption area/ line section/ feeders;
- (d) pilferage area;
- (e) Disaster prone area;
- (f) Multi line crossing;
- (g) Road/River/Level crossing;
- (h) Frequent neutral missing area etc.

# 3.04 Power Interruption and Outage Records

One of the main purposes of interruption reporting is to provide a record of causes and extent of interruptions for determining adequacy of maintenance and for planning system improvement to increase service reliability. This record will supplement the line maintenance records to provide an important tool for planning effective maintenance program.

		RURAL ELECTRIFI		
	PBS INSTRUCTI ENGINEERING AND	ON 100-59/ PBS INSTE OPERATIONS RECOR	RUCTION 300-60: D UPDATE PROCESS	35
Date of Origin	Reviewed by	Approved by	Page No.	Revision No.
31/10/2005	BREB	BREB Board	Page 14 of 37	2
Revision Date: 01/09	9/2013 & 19/02/2020	3		
	man or of		JIVEN	_
(Md. Mozibur Rahman)	(Md. Duhidul Isl	am) (Md. Mazamme	Hugh (Md. Abdul Khalequer) RREpnsultant TAPP. BE	DER

৬২১ তম বোর্ড সভায় অনুমোদিত বি

(Md. Alsanul Haque) Consultant, TAPP, BREB

(Debasish Chakrabortty)
PD TAPP BREB

(Kamrul Ahsan Mollik)

The AGM(O&M) of each PBS area will therefore ensure power interruption recording and reporting incompliance to PBS Instruction 100-18. He/ She will also ensure that the field crews are well conversant with BREB Forms 100-18-01 (Old No. 590), 100-18-02 (Old No. 591), and 100-18-03 (Old No. 592) in recording the appropriate data.

#### 3.05 Update of Records

Records updating is an ongoing process. The PBS should have a definite process in place that assures all O&M records are up to date within 30 days, at all times, according to the guideline of this instruction. Senior General Manager/ General Manager of the PBS will implement procedures to facilitate a routine monthly check on O&M records update.

The Junior Engineer (ERC) shall receive a copy of all Equipment Cards and all subsequent inspection and maintenance reports on equipment from AGM(O&M). The Junior Engineer (ERC) will utilize this data for updating equipment records in the REC software. The Senior General Manager/ General Manager of PBS will make sure that this process is done on a continuous basis.

### Part-4: Operating Responsibilities for Data Flow and Record Updating;

#### 4.01 CMO and Transformer Replacement Data

The ultimate responsibility for supplying complete, correct data to the Junior Engineer (ERC) concerning CMOs, transformer issues, transformer installation and transformer replacement, shall be within the PBS Senior General Manager/ General Manager. He/

		ON 100-59/ PBS INSTE OPERATIONS RECOR		pr.
Date of Origin	Reviewed by	Approved by	Page No.	Revision No
31/10/2005	BREB	BREB Board	Page 15 of 37	2

(Md. Mozibur Rahman)

(Md. Duhidul Islam)

(Md. Mozammel Hud) onsultant TAPP. BREB

onsultant TAPP RPE ২১ তম বোর্ড সভায় অনুমোদিত সিদ্ধান্ত

PD TAPP BREB

She shall delegate the oversight and monitoring of these process to the DGM(Tech-HQ)/ AGM(O&M-HQ) and further he/ she shall delegate data supply functions themselves to a Junior Engineer at each Zonal Office and PBS Head Quarter.

### 4.02 Energization Forms (BREB Form No. 459)

The responsibility for supplying data (Via BREB Form No. 459, Energization) to RE concerning equipment installed on line extension projects by the BREB Projects, shall lie with the RE himself/ herself. He/ She shall obtain this information while performing acceptance inspections for newly constructed line.

### 4.03 Consolidating All Field Data Flow

Responsibility of consolidating all the field data, checking for correctness of the data and timely updating of the operational diagram and maps and ERC database in prescribed manner will be assigned to Consultant (when there is contract with Consultant) or to the Junior Engineer (assigned for ERC) of the PBS. This responsibility can be delegated to the responsible subordinates of the RE provided they are adequately trained to check the accuracy of data collected from the field and update the operational diagram, maps and ERC database.

Note: Staking the AS-Built Staking Sheets on bookshelves is NOT acceptable. RE of the consultant will be responsible for proper storage of the current and past operational diagrams. They shall retain all operational diagrams for 5 years past. He/ She will also be responsible to report to the Senior General Manager/ General Manager of respective PBS any shortfall in receipt of data from PBS personnel. DGM(Tech-HQ) and AGM(O&M) in each PBS area will be responsible for maintaining up-to-date pole numbers physically placed on the pole.

*	BANGLADESH F	RURAL ELECTRIFI	CATION BOARD	
		ON 100-59/ PBS INSTE OPERATIONS RECOR		
Date of Origin	Reviewed by	Approved by	Page No.	Revision No.
31/10/2005	BREB	BREB Board	Page 16 of 37	2

(Md. Mozibur Rahman)

hsanul Hague

Consultant TAPP BREE

(Md. Duhidul Islam) Consultant TAPP BRE (Md. Morammel Huq) (Md. Abdul Khaleque) onsultant, TAPP BREB

(Dehasish Chake

Debasish Chakrabortty

৬২১ তম বোর্ড সভায় অনুমো**দিত সিদ্ধান্ত দং** ১৭৭০০

(Ramrul Ahsan Mollik)

### 4.04 ERC Data Up-Keeping

DGM(Tech-HQ) of the PBS shall be responsible for proper upkeeping data on a perpetual basis ensuring proper operating of necessary computer hardware and software support and also by keeping a back-up copy of ERC database. DGM (Tech-HQ) shall also be responsible for maintaining up-to-date virus protection software on the computer(s) used for ERC data keeping.

#### 4.05 Sub-station and Electrical Network O&M Records

The responsibility for maintenance and updating sub-station and electrical network O&M records will be assigned to the AGM(O&M) in each PBS. It will be necessary to delegate some of this responsibility but AGM(O&M) will maintain the overall responsibility of the maintance of adequate records in his/ her jurisdiction.

	BANGLADESH F	RURAL ELECTRIFI	CATION BOARD	
		ON 100-59/ PBS INSTI OPERATIONS RECOR		*
Date of Origin	Reviewed by	Approved by	Page No.	Revision No.
31/10/2005	BREB	BREB Board	Page 17 of 37	2

(Mtl Mozibur Rahman) Consultant, TAPP, BREP

(Md. Duhidul Islam) (Md. Mozammei Huq) Consultant, TAPP BRETConsultant, TAPP, BREB

(Md. Abdul Khaleque) Consultant TAPP, BRER

(Md. Ansanul Haque)

Debasish Chakrabortty

২১ তম বোর্ড সভায় অনুমোদিত সিদ্ধান্ত নং ১৭৭০০

(Kamrul Alsan Mollik)

### Part-5: Reporting on Data/ Record Update Progress.

#### 5.01 Scope

This part of the instruction presents guideline for systematic reporting by Senior General Manager/ General Manager to BREB about actual progress in updating the E&O(Engineering and Operation) Records of the PBS, which may serve as a tool for routine accuracy verification by Zonal Superintending Engineer and System Operation Directorate of BREB. It is intended to provide guidance for the PBS personnel, who shall ensure update E&O Records.

#### 5.02 Reporting Schedule and Forms

SI No.	Reporting Items	Frequency	Use of Form
01	Equipment (Including Transformer) Record update	Monthly	BREB Form No. 100-59-04
02	Operational Diagram and Map update	Monthly	BREB Form No. 100-59-05
03 -	Sub-station and Electrical Network O&M Records update	Quarterly	BREB Form No. 100-59-06

		ON 100-59/ PBS INSTI OPERATIONS RECOR		
Date of Origin	Reviewed by	Approved by	Page No.	Revision No.
31/10/2005	BREB	BREB Board	Page 18 of 37	2

(Me. Mozibur Rahman)
Consultant TAPP BREP

(Md. Duhidur Islam), Consultant TAPP RREF

(Md. Myzammer Hug) consultant, TAPP BREB

(Md. Abdul Khaleque)
Consultant TAPP. BREI

(Md. Ahsanul Haque) Consultant, TAPP, BREP

(Debasish Chakrabortty)
PD, TAPP, BREB.

৬২১ তম বোর্ড সভায় অনুমোদিত সিদ্ধান্ত নং ১৭৭০০

(Kamrul Alican Month)

#### 5.03 Reporting for Non-Availability of Data

As the RE of the consultant is dependent on PBS personnel to provide data for updating the Equipment Records the Operational Diagram and Maps, the entire process of data updating will become ineffective if the required data is not received by the RE in a timely manner. In the event of non-availability of required data, the RE shall promptly notify the concern Senior General Manager/ General Manager about it through a letter with copy to BREB Chief Engineer (P&O) and keep pursuing the data until the data is received.

	BANGLADESH F	RURAL ELECTRIFI	CATION BOARD	
		ON 100-59/ PBS INSTI OPERATIONS RECOR		
Date of Origin	Reviewed by	Approved by	Page No.	Revision No.
31/10/2005	BREB	BREB Board	Page 19 of 37	2

(Md. Mozibur Rahman) Consultant TAPP, BREV (Md. Duhidul Islam) Consultant TAPP DEF

(Md. Mozammei Hug) Consultant TAPP, BREP

(Md. Abdul Khaleque) Consultant TAPP, BREB

(Md. Ahsanul Haque)
Jonsultant, TAPP, BREB

Obelasish Chakrabortty)
PD, TAPP, BREB.

৬২১ তম বোর্ড সভায় অনুমোদিত সিদ্ধান্ত নৃং ১৭৭০

#### BREB Form No. 100-59-09 (Version-1)

**Grid substation Survey Sheet** 

SI No.	Field	Details	GIS Field Name
01	Way_point_ID		
02	Latitude		
03	Longitude		
04	Grid Substation name		
05	Grid Substation Code / ID		
06	Grid Substation unit name		
07	Grid Substation capacity		
08	Grid Substation source line		
09	No_of_outgoing 33kv feeders		
10	No_of_1st outgoing 33kv feeders name & capacity		
11	No_of_2nd outgoing 33kv feeders name & capacity		
12	No_of_3rd outgoing 33kv feeders name & capacity		
13	No_of_4th outgoing 33kv feeders name & capacity		
14	No_of_incoming source line		
15	Bus cupling		
16	Energized date		
17	Name of the source line		
18	No-of-power transformer		
19	Date_Survey		
20	Area_Name		
21	Sheet_number		
22	Surveyor		
23	Intstrument_Sl_no		
24	Grid_name		
25	Name of PBS		
26	Grid_capacity		
27	Village_Mouza		
28	Remarks		

	BANGLADESH	RURAL ELECTRIFI	CATION BOARD	
		ON 100-59/ PBS INSTI OPERATIONS RECOR		
Date of Origin	Reviewed by	Approved by	Page No.	Revision No.
31/10/2005	BREB	BREB Board	Page 20 of 37	2

(Md. Mozibur Rahman)

(Md. Duhida Islam)
Consultant, TAPP RRES
Consultant, TAPP, BREB

(Ma. Abdul Khaleque, Consultant, TAPP, BREB

৬২১ তম বোর্ড সভায় অনুমোদিত সিদ্ধান্ত

(Md. Ansamul Haque, Consultant, TAPP, BREF (Debasish Chakrabortty PD, TAPP, BREB.

# BREB Form No. 100-59-10(Version-1) Switching Station (11 KV) Survey Sheet

SI No.	Field	Details	<b>GIS Field Name</b>
01	Way_point_id		
02	Latitude		
03	Longitude		
04	Substation name		
05	Substation Code / ID		
06	Energized date		
07	Substation unit type		
08	Rating of power transformer		
09	Name of the source line		
10	No_of_incoming breaker		
11	No_of_outgoing breaker		
12	Name_of_1st outgoing line & capacity		
13	Name_of_2nd outgoing line & capacity		
14	Name_of_3rd outgoing line & capacity		
15	Name_of_4th outgoing line & capacity		
16	Name_of_5th outgoing line & capacity		
17	Name_of_6th outgoing line & capacity		
18	Switching Station capacity		
19	Maintanace_date		
20	Remarks		

	BANGLADESH F	RURAL ELECTRIFI	CATION BOARD	
	PBS.INSTRUCTI	ON 100-59/ PBS INSTI	RUCTION 300-60:	
	ENGINEERING AND	OPERATIONS RECOR	D UPDATE PROCESS	
Date of Origin	Reviewed by	Approved by	Page No.	Revision No.
31/10/2005	BREB	BREB Board	Page 21 of 37	2

(Md. Mozibur Rahman)

(Md.Ahsanul Haque) Consultant, TAPP, BREB

(Md. Duhidul Islam)
Consuitant TAPT DEFT
(Debasish Chakrahortty)
PD, TAPP, BREB.

(Md. Mozamme) Huq)

(Md. Abdul Khaleque) Consultant, TAPP, BREB

BREB Form No. 100-59-11 (Version-1)

# **Sub-Station Busbar Survey Sheet**

SI No.	Field	Details	GIS Field Name
01	Substation name		
02	Latitude		
03	Longitude		
04	Substation capacity		
05	Unit Name		
06	No_of_Conductor		
07	Conductor Size		
08	No_of_11KV Feeder		
09	Type of Structure		
10	No_Pole		
11	Type of Pole		
12	No_of_Connected Feeder		
13	Remarks		

	BANGLADESH F	RURAL ELECTRIFI	CATION BOARD			
		ON 100-59/ PBS INSTI				
Date of Origin Reviewed by Approved by Page No. Revis						
31/10/2005	BREB	BREB Board	Page 22 of 37	2		

(Md. Mozibur Rahman) Consultant TAPP BREF (Md. Duhidul Islam)
Consultant TAPP RRE

(Md. Mozammet Huq) Consultant TAPP BRE (Md. Abdul Khaleque)
Corsultant TAPP. BREP

Consultant, TAPP, BREB

(Debasish Chakrabortty)

PD, TAPP, BREB

৬২১ তম বোর্ড সভাই অনুসোদর সিজ্জু নং ১৭৭

(Kamrul Ahsan Mollik)
Asst. Secv. (Roard) RPEP

BREB Form No. 100-59-12 (Version-1)

# **Consumer Survey Sheet**

SI No.	Field	Details	<b>GIS Field Name</b>
01	Way point ID / SL No.	111 100	
02	Pole No / ID		
03	Facility_ID		
04	Lat		
05	Long		
06	Elevation		
07	Consumer Category (LP, GP, Irr, Dom, Com, ST, Charitable, Others)		
08	Consumer_Meter Number/ID		
09	Consumer Meter Type		
10	Current Status		
11	Meter_Type		
12	Meter Class		
13	Meter Manufacturer		
14	Meter Checking Date		
15	Consumer Meter Photo		
16	Name of Consumer	1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	
17	Father's Name		
18	Address		
19	No. of floor		
20	Building name		
21	Consumer Account No.		
22	Contact details		
23	Sanctioned Load / Contract Load		
24	Consumer Category / Type		
25	Distribution Transformers ID		

	BANGLADESH I	RURAL ELECTRIFI	CATION BOARD				
E.		ON 100-59/ PBS INSTI					
	ENGINEERING AND	OPERATIONS RECOR	D UPDATE PROCESS				
Date of Origin	Date of Origin Reviewed by Approved by Page No. Revision						
31/10/2005	BREB	BREB Board	Page 23 of 37	2			

Revision Date: 01/09/2013 & 19/02/2020

(Md. Ahsanul Haque, Consultant, TAPP, BREB

(Md. Mozibur Rahman) (Md. Duhiodi Islam)

(Debasish Chakrabortty) PD, TAPP, BREB (Md. Morammei Hud), consultant, TAPP, BRER

(Md. Abdul Khaleque) Consultant, TAPP, BREB

১২১ তম বোর্ড সভায় অনুমোদিত সিদ্ধান্ত নং ১৭৭০<sup>০</sup>

SI No.	Field	Details	GIS Field Name
26	Distribution Transformers Capacity		
28	Distribution Transformers Bank Capacity		
29	Substation_Capacity		
30	Metering Type (Primary / Srcondary)		
31	PFI_Capacity		
32	Having Auto PFI		
33	Service drop size		
34	Service drop length		
35	Re-connection date		
36	Disconnection date		
37	Change date		
38	Feeder Name		
39	Feeder ID/Code		
40	Sub Stations		
41	Connection_Date		
42	Consumer_Substation_Capacity		
43	Sub Stations Protecting Divce		
44	Having Breaker		
45	Having ACR		- 41
46	CT_Ratio		
47	PT_Ratio		
48	Muiltiplying Factor		
49	LT-CT_Ratio		38
50	33 KV metering		
51	11 KV metering		
52	Secondary metering		
53	Date_Survey		
54	Area_Name		

	BANGLADESH I	RURAL ELECTRIFI	CATION BOARD		
		ON 100-59/ PBS INSTI			
Date of Origin Reviewed by Approved by Page No. Revision					
31/10/2005	BREB	BREB Board	Page 24 of 37	2	

(Md. Mozibur Rahman)

(Md. Dunidul Islam)
Consultant TAPP PRIEF

Md. Morammei Hugj onsultani: TAPP. BREP (Mod Arodul Khaleque) Consultant, TAPP, BREB

(Md. Ansanul Haque) Consultant, TAPP, BREB

Debasish Chakrabortty)
PD,TAPP, BREB.

৬২১ তম বোর্ড সভার জনুমোদিও সিদ্ধান্ত নং ১৭৭০ট

SI No.	Field	Details	<b>GIS Field Name</b>
55	Sheet_number		
56	Surveyor		
57	Intstrument_Sl_no		
58	Grid_name		
59	Grid_capacity		
60	Name of PBS		
61	Village_Mouza		
62	Remarks		

	BANGLADESH I	RURAL ELECTRIFI	CATION BOARD	
	PBS INSTRUCTI	ON 100-59/ PBS INSTI	RUCTION 300-60:	
	ENGINEERING AND	OPERATIONS RECOR	D UPDATE PROCESS	
Date of Origin	Reviewed by	Approved by	Page No.	Revision No.
31/10/2005	BREB	BREB Board	Page 25 of 37	2

(Md. Mezibur Rahman) (Md. Duhidul Islam)

Insentiant TAPP BREPConsultant TAPP RREF

Isanul Haque) (Debasish Chakrabortty)

PD, TAPP, BREB

(Md. Mozammel Huq) Consultant TAPP, BREB

(Md. Andul Khaleque) Consultant, TAPP, BREB

(Md. Ahsanul Haque) Consultant, TAPP, BREB

৬২১ তম বোর্ড সভায় অনুমোদিত সিদ্ধান্ত দং ১৭৭০০

#### BREB Form No. 100-59-13 (Version-1)

# **PBS** substation Survey Sheet

SI No.	Field	Details	GIS Field Name
01	Way_point_ID		
02	Latitude		
03	Longitude		
04	PBS Substation name		
05	PBS Substation Code / ID		
06	PBS Substation unit name		
07	PBS Substation capacity		
08	PBS Substation source line		
09	No_of_outgoing 11kv feeders		
10	No_of_1st outgoing 11kv feeders name & capacity		
11	No_of_2nd outgoing 11kv feeders name & capacity		
12	No_of_3rd outgoing 11kv feeders name & capacity		
13	No_of_4th outgoing 11kv feeders name & capacity		
14	No_of_incoming source line		
15	Bus cupling		
16	Energized date		
17	Name of the source line	_	
18	No-of-power transformer		
19	Date_Survey		
20	Area_Name		
21	Sheet_number		
22	Surveyor		
23	Intstrument_Sl_no		
24	Grid_name		
25	Name of PBS		
26	Grid_capacity		
27	Village_Mouza		
28	Remarks		

	BANGLADESH F	RURAL ELECTRIFI	CATION BOARD	
		ON 100-59/ PBS INSTI		
	ENGINEERING AND	OPERATIONS RECOR	D UPDATE PROCESS	
Date of Origin	Reviewed by	Approved by	Page No.	Revision No.
31/10/2005	BREB	BREB Board	Page 26 of 37	2
evision Date: 01/09	/2013 & 19/02/2020			

(Md Mozibur Rahman)

(Md. Dunidul Islam) Consultant. TAPP BREP

(Md. Mizammel Hug) onsultant TAPP BREF

(Md. Abdul Khaleque) Consultant, TAPP, BREB

(Md. Ahsanul Haque) Consultant, TAPP, BREB

Debasish Chakrabortty)
PD, TAPP, BREB.

৬২১ তম বের্ড স্ভার জনুদর্শনত সিদ্ধান্ত নং ১৭৭০০

### BREB Form No. 100-59-01 (Version-1)

**Equipment Issue Record** 

			Equipme	ent	Issue Record			
Name of PB	BS :							
	1 <sup>st</sup> (	Copy JE(ER	C), 2 <sup>nd</sup> Copy C	ont	ractor/ PBS Linema	an, 3rd Cop	y Storekeeper	
Issue Date		ent Name rial No.	Year of Manufacture	er	Name of the Manufacturer	1-Ø or 3-Ø	Rating (KVA/A/Ratio)	Type (Noter-1
i i		Issued	to Whom				Work Order No.	
PBS Head (	Quarter		fice (Name)	С	ontractor Name			
Issue Date	Equipm	ent Name	Year of	_	Name of the	1-Ø or	Rating	Туре
	1 55 75	rial No.	Manufacture	er	Manufacturer	3-Ø	(KVA/A/Ratio)	(Noter-1)
			to Whom	_			Work Order No.	
PBS Head (	PBS Head Quarter Zonal Office (Name		fice (Name)	С	ontractor Name			
Issue Date		ent Name	Year of Manufacture	er	Name of the Manufacturer	1-Ø or 3-Ø	Rating (KVA/A/Ratio)	Type (Noter-1
		Issued	to Whom				Work Order No.	
PBS Head (	Quarter		fice (Name)	С	ontractor Name		TOTA OTGET THE	
				_		I		
Issue Date		ent Name rial No.	Year of Manufacture	er	Name of the Manufacturer	1-Ø or 3-Ø	Rating (KVA/A/Ratio)	Type (Noter-1
15		100000000000000000000000000000000000000	to Whom				Work Order No.	
PBS Head (	Quarter	Zonal Of	fice (Name)	C	ontractor Name			
Issue Date	Equipm	ent Name	Year of		Name of the	1-Ø or	Rating	Туре
		rial No.	Manufacture	er	Manufacturer	3-Ø	(KVA/A/Ratio)	(Noter-1)
			to Whom					
PBS Head (	Quarter	Zonal Of	fice (Name)	C	ontractor Name		Work Order No.	3

Date, Signature & Seal of Storekeeper

Date, Signature & Seal of Recorder

Note-1: Conventional or CSP, Stake Core or Amorphous Core etc.

	BANGLADESH F	RURAL ELECTRIFI	CATION BOARD	
		ON 100-59/ PBS INSTI OPERATIONS RECOR		
Date of Origin	Reviewed by	Approved by	Page No.	Revision No.
31/10/2005	BREB	BREB Board	Page 27 of 37	2

(Md. Mozibur Rahman)

Onsultant TAPD DDG

(Md. Ahsanul Haque)

Consultant, TAPP, BREB

(Debasish Chakrabortty) PD, TAPP, BREB (Md. Myzamme) Hug) onsultant TAPP BRET

(Md. Abdul Khaleque) Consultant, TAPP, BREB

২১ তম বোর্ড সভায় অনুমোদিত সিদ্ধান্ত নং ১৭৭ ০০

BREB Form No. 100-59-02 (Version-1)

**Equipment Installation Record** 

Install Date	Manufac- turerSl	Equipment Name & Rating	lating Information		Feeder No.	Pole No.	Connect Phase&	Install Location
	No.	(KVA/A/Ratio)	Name	ID No.			Purpose of Use	
		- i						
1,727								
122			,					
	3:							
					V C ===##			
			1,7					11-11-1-1

Date, Signature & Seal of Recorder Date, Signature & Seal of AGM(O&M/E&C)

		ON 100-59/ PBS INSTI OPERATIONS RECOR	RUCTION 300-60:	
Date of Origin	Reviewed by	Approved by	Page No.	Revision No.
31/10/2005	BREB	BREB Board	Page 28 of 37	2

(Md. Mozibur Rahman) Consultant, TAPP BREF (Md. Duhidul Islam).
Consultant TAPP BREP

(Md. Mazammel Hug) Consultant TAPP BREP

(Md. Abdul Khaleque, Consultant, TAPP, BREB

(Md. Ansmul Haque) Consultant, TAPP, BREB Debasish Chakrabortty)
PD, TAPP, BREB:

২১ তম বোর্ড সভার অনুমোদিত সিদ্ধান্ত ন

BREB Form No. 100-59-03 (Version-1)

Fami	mmont D	omeowal l	Danamal
Equi	pment R	emovai i	Record

		Lqu	pinent	LECTIO !	al Record			
Remove Date	Manufc- turerS1	Equipment Name &	Sub-St Inform		Feeder No.	Pole No.	Remove From	Remove Reason
	No.	Rating (KVA/A/Ratio)	Name	ID no.			(Location)	(Reason No.)
	W							
				47				
	*							

Reason of Remove	Failure	Custer Request	Over Load	Under Load	Oil Contami-na tion	Oil Le ak	Vandalism	Stolen	Others
Reason No.	1	2	3	4	5	6	7	8	9

Date, Signature & Seal of Recorder Date, Signature & Seal of AGM(O&M/E&C)

		ON 100-59/ PBS INSTE		
	ENGINEERING AND	OPERATIONS RECOR	D UPDATE PROCESS	
Date of Origin	Reviewed by	Approved by	Page No.	Revision No.
31/10/2005	BREB	BREB Board	Page 29 of 37	2

Revision Date. 01/09/2013 & 19/02/.

(Md. Mozibur Rahman) Consultant, TAPP, BREF

(Md. Ahsanul Haque, Consultant, TAPP, BREB (Md. Duhidul Islam)

(Debasish Chakrabortty)
PD, TAPP, BREB

(Mg. Mozammer Huq) Consultant, TAPP, BREB

(Md. Abdul Khaleque) Consultant, TAPP, BREB

७२३ ज्य ब्वार्ड म्हाय जनुरमापिक मिकाल नः ১११० वृ

BREB Form No. 100-59-04 (Version-1)

Page 1 of 2

Report on Equipment Record Undate

				ent Record		
	Issued To	Name of Equipment	No. of Repaired Equipment Issued	No. of New Equipment Issued	Total No. of Equipment Issued	Total No. of Equipment Removal Form Received with Damage Equipment
	Head	Transformer				
	Quarter	CT/PT				
-		V. Regulator				
Section		ACR/OCR/OCB				
Sec	Zonal	Transformer				
er (	Office1	CT/PT				
eep		V. Regulator				
Store Keeper		ACR/OCR/OCB				
tor	Zonal	Transformer				
0)	Office2	CT/PT				
		V. Regulator				
		ACR/OCR/OCB				
	Contrac-	Transformer				
	tor	CT/PT				
		V. Regulator				
		ACR/OCR/OCB				

Prepared by: -----

Store Keeper

AGM(E&C)/ AGM(O&M)- HQ Section	No. of Equipment Ir Collected from BRE supplied	B Form 459 and	No. of Equipment Removal Forms supplied to RE		
*	Mini Contractor/ PBS Crews	Project Contractor of BREB	Mini Contractor/ PBS Crews	Project Contractor of BREB	

Prepared by:	Date, Seal & Signature	Counter Sign by:
RE	DGM(Tech-HQ)	Sr. GM/ GM

	BANGLADESH I	RURAL ELECTRIFI	CATION BOARD	
	PBS INSTRUCTI	ON 100-59/ PBS INSTI	RUCTION 300-60:	
	ENGINEERING AND	OPERATIONS RECOR	D UPDATE PROCESS	
Date of Origin	Reviewed by	Approved by	Page No.	Revision No.
31/10/2005	BREB	BREB Board	Page 30 of 37	2

(Md. Mozibur Rahman) (Md. Duhidul Islam)

(Md. Mazammei Huq) Consultani TAPP BRE

Md. Abdul Khaleque, Consultant, TAPP, BREB

(Md. Ansanul Haque) Consultant, TAPP, BREB

(Debasish Chakrabortty) PD, TAPP, BREB

BREB Form No. 100-59-04 (Version-1)

Page 2 of 2

	Location	No. of Equ	ipment Rec	CMO Information				
O&M Section		Issue Form Received fromsStore	Install Forms Supplied to RE	Removed Forms Supplied to RE	Removed Forms Supplied to Store with Damage	Supplied to RE with proper data	Returned from RE for correction	Re- Checked and Re- Sent to RE
08	HQ							
	ZO-1							
	ZO-2							
	ZO-3							
	ZO-4							

Prepared by:	
	AGM(O&M)- HQ

	No. of I	Equipment Rec Inform	CMO Information				
RE Section	Equip Data input into ERC Software	Equip Installation Forms input into ERC Software	Equip Removal Forms input into ERC Software	Equip Installation from BREB Forms No. 459 input into ERC Software	No. of CMO Data input into ERC Software	No. of CMO Data Returned	No. of Corrected CMO Data input into ERC

Prepared by:	Counter Signed by:
Retainer Engineer	Sr. GM/ GM

Copy to: 1. Director (PBS Monitoring & Management Operation), BREB 2. Superintending Engineer, GIS/ Zonal ------, BREB

	BANGLADESH I	RURAL ELECTRIFI	CATION BOARD	
		ON 100-59/ PBS INSTI		
	ENGINEERING AND	OPERATIONS RECOR	D UPDATE PROCESS	
Date of Origin	Reviewed by	Approved by	Page No.	Revision No.
31/10/2005	BREB	BREB Board	Page 31 of 37	2

(Md. Mozibur Rahman)

(Md. Duhidul Islam) onsuitant TAPP BRE

(Md. Mozammel Huq) Consultant TAPP BREP

(Md. Abdul Khaleque) Consultant, TAPP, BREF

(Md. Alisanui Haque) Consultant, TAPP, BREB

PD, TAPP, BREB.

৬২১ তম বোর্ড সভায় অনুমোদিত সিদ্ধান্ত নং ১৭৭০০

BREB Form No. 100-59-05 (Version-1)

(1) Work  No. of  Close Out	Line Energized (KM)		Pole No. Assigned/ Numbered		Equipment Install X-er/VR/ACR/OCR/OCB/ Other		
	HT LT					(No.)	
					Transforme		
					Voltage Re	gulator	
					ACR		
					OCR		
					OCB		1
					Others		
(2) Worl	Done h	v PBS Li	neman and P	PRS Mini	Contractor		
No. of		nergized	Pole No. A			nipment I	nstall
Close Out	(KM)		Numbe		X-er/VR/ACR/OCR/OCB/ Other		
	HT	LT			(No.)		
					Transforme		
					Voltage Re		
					ACR	guiator	
			137		OCR		
					OCB		
					Others		
		W			omers		
			d Man Unda	ting for (	Changes in t		
							ni1
		agram an Single Line			No. of Shee	ets in Det	211
	eeders in	Single Line		Update C	SECTION OF THE PROPERTY.	All Spirit and Fee La Scientific Co.	Pending
No. of F	eeders in	Single Line	e Diagram	Update C	SECTION OF THE PROPERTY.	All Spirit and Fee La Scientific Co.	
No. of F	eeders in	Single Line	e Diagram	Update (	SECTION OF THE PROPERTY.	All Spirit and Fee La Scientific Co.	
No. of F	eeders in	Single Line	e Diagram	Update (	SECTION OF THE PROPERTY.	All Spirit and Fee La Scientific Co.	
No. of F Update Cor epared by:	eeders in	Single Line Update	e Diagram Pending		SECTION OF THE PROPERTY.	Update	Pending
No. of F Update Con	eeders in	Single Line Update	e Diagram Pending		Complete	Update	

	BANGLADESH I	RURAL ELECTRIFI	ICATION BOARD	
		ON 100-59/ PBS INSTI OPERATIONS RECOR		
Date of Origin	Reviewed by	Approved by	Page No.	Revision No.
31/10/2005	BREB	BREB Board	Page 32 of 37	2

(Md. Mozibur Rahman)

(Md. Duhldul Islam) Consultant TAPP RRET Consultant, TAPP, BREB

(Debasish Chakrabortty
PD, TAPP, BREB

(Md. Morammer Hue) (Md. Consultant TAPP BREP Consultant TAPP BREP CONSULTANT STATEMENT STATEMEN

(Md. Abdul Khaleque)
Consultant TARP BRESS Q OD

BREB Form No. 100-59-06 (Version-1)

. 50	in-Station	Record	s Update	Physically Checked and Records Updated for					
SL No. Name of Substation	Date of Inspection	33 kV ACR/ OCR/ Breaker	Power X-er	VR	11 kV ACR/ OCR/ Breaker	Feeder Loads	System	Damage Part (Isolator, LA, Bushing, Line Hardware etc.)	
		1							
rep	ared by:		- Date,	Seal & Si	gnatur	e	Со	unter Sigi	n by:
	RE		DG	M(Tech-	HO)	Sr. G	M/ GI	Л	

		URAL ELECTRIFI ON 100-59/ PBS INSTI		
	ENGINEERING AND	OPERATIONS RECOR	D UPDATE PROCESS	
Date of Origin	Reviewed by	Approved by	Page No.	Revision No.
31/10/2005	BREB	BREB Board	Page 33 of 37	2
Revision Date: 01/09	9/2013 & 19/02/2020			OMN-
(Md Mozibur Rahma	m) (Md. Duhidul Isla)	m) (Md. Mozami	The Hug Con See BREP	d. Abdul Khaleque, sultant Trapp BREB
	epasish Chakrabortty		र नामारा जानुस्थ	

(Kamrul Ahsan Mollik) Asst. Secy. (Board), BREB.

Page 1 of 3

BREB Form No. 100-59-06 (Version-1)

Page 2 of 3

	- 100	00 (.	
2. Electrical	Network	Records	Update

Name of	Feeder	Date of	Physically Checked and Records Updated for							
Substation	No.	Inspec- tion	Line I&M (Km)	VR I&M	ACR/ OCR/ OCB I&M	Capaci tor I&M	Voltage & Current Surveyed	Meter Record	X-er Record	Opera- tional Diagram & Maps
	1A									
	2B									
	3C									
	4D									
	5E									
	6F									
	1A									
	2B									
	3C									
	4D									
	5E									
	6F									
	1A									
	2B									
	3C									
	4D									
	5E									
	6F									
	1A									
	2B									
	3C								-	
35	4D									
	5E									
	6F									

Prepared by:	Date, Seal & Signature	Counter Sign by:
RE	DGM(Tech-HQ)	Sr. GM/ GM

	BANGLADESH F	RURAL ELECTRIFI	CATION BOARD	
		ON 100-59/ PBS INSTI		
	ENGINEERING AND	OPERATIONS RECOR	D UPDATE PROCESS	
Date of Origin	Reviewed by	Approved by	Page No.	Revision No.
31/10/2005	BREB	BREB Board	Page 34 of 37	2

(Md. Moziber Kahman)

(Md. Ahsanul Haque) Lonsultant, TAPP, BREB

(Md. Duhidul Islam)

Debasish Chakrabortty)
PD, TAPP, BREB.

(Md. Morammel Huq) ensultant. TAPP. BREP

(Md. Abdul Khaleque) Consultant TAPP, BREB

BREB Form No. 100-59-06 (Version-1)

Page 3 of 3

3. Line Maintenance Records Update

Name of	Feeder	Updated Problematic Identified for								
Substation	No.	Right of Way Clearing	Over Loaded Line Section/ Feeder	High Interrupting Line Section/ Feeder	Pilferage area	Disaster Prone area	Multi Line Crossing	Road/ River / Level Crossing	Frequent Neutral Missing area	
	1A			8						
	2B									
	3C	11-24-11								
	4D									
	5E									
	6F									
	1A									
	2В									
	3C		20							
	4D		15							
	5E									
	6F									
	1A									
	2B									
	3C									
	4D									
	5E									
	617									
	1A									
	213									
	3C								110	
3	4D									
	5E									
	6F									

Prepared by:	Date, Seal & Signature	eal & Signature Counter Sign by:					
RE	DGM(Tech-HQ)	Sr. GM/ GM					
	BS Monitoring & Management ding Engineer, GIS/ Zonal						

	BANGLADESH I	RURAL ELECTRIFI	CATION BOARD	
		ON 100-59/ PBS INSTI		
		OPERATIONS RECOR	D UPDATE PROCESS	
Date of Origin	Reviewed by	Approved by	Page No.	Revision No.
31/10/2005	BREB	BREB Board	Page 35 of 37	2

(Md. Mozibur Rahman)

(Md. Duhidul Islam) Consultant TAPP BREF

(Md. Moxammer Huq) Consultant: TAPP, BREP

(Md, Abdul Khaleque)

(Md. Ahsanul Haque) Deba Consultant, TAPP, BREB

Debasish Chakrabortty)
PD,TAPP, BREB

৬২১ তম বোর্ড সক্রম জ

BREB Form No. 100-59-07 (Version-1)

Equipment Undate Card

				t Update C				
Date	Equip Name	Serial No.	Manu- facturing Year	Manu- facturer Name	Rating (KVA/A)	Type (Note-1)	Connect Phase	% Imp
Substation		Po	ble No.		Feeder	Install Location	Meter No.	
Connected Consumer	Dom	Com	GP	LP	Street Light	STW	DTW	LLF
Date	Equip Name	Serial No.	Manu- facturing Year	Manu- facturer Name	Rating (KVA/A)	Type (Note-1)	Connect Phase	% Imp
Substation		Po	ole No.		Feeder	Install Location	Meter No.	
Connected Consumer	Dom	Com	GP	LP	Street Light	STW	DTW	LLF
Date	Equip Name	Serial No.	Manu- facturing Year	Manu- facturer Name	Rating (KVA/A)	Type (Note-1)	Connect Phase	% Imp
Substation		Po	ole No.		Feeder	Install Location	Meter No.	
Connected Consumer	Dom	Com	GP	LP	Street Light	STW	DTW	LLF

Note-1: Conventional, CSP, Standard Core, Amorphous etc.

Date, Signature & Seal of Climber

Date, Signature & Seal of Recorder

Counter Sign by AGM(O&M/E&C)

		RURAL ELECTRIFI ON 100-59/ PBS INSTI	AND A PRODUCTOR OF THE PRODUCTOR AND ADDRESS OF THE PARTY	
		OPERATIONS RECOR		
Date of Organi	Reviewed by	Approved by	Page No.	Revision No.
31/10/2005	BREB	BREB Board	Page 36 of 37	2

(Md. Mozibur Rahman) Consultant TAPP. BRFF (Md. Durituu Islam) opsuitant TAPP BRE

(Md. Moxammel Huq) Consultant, TAPP BREP

(Md. Abdul Khaleque) onsultant TAPP, BREB

(Md. Ansanul Haque) Consultant, TAPP, BREB

(Debasish Chakrabortty)
PD, TAPP, BREB.

১১ তম বোর্ড সূতার অনুমোদর সিদ্ধান্ত ন ১৭৭০০

### BANGLADESH RURAL ELECTRIFICATION BOARD BREB Form No. 100-59-08(Version-1)

Work/Data Flow Chart for Equipment Record Update Billing Section Issue CMO with space to note PBS Field Equipment Pole No. & Conductor Phase Crew Replace damaged Project Mini Project Repair Worksho Equipment, COM Contractor Contractor/ Contractor Junked Repair Fill out PBS Field Installed Equipment | Equipment Removed Equipment Equipment Crew Equipment, PBS Field Install/ fill out Install/ Fill out Crew Remove Equipment Remove Equipment Install/ Record Remove data on Equipment, Remove (Form Page-2 of Fill out Record Meter, 100-59-02/ BREB form Equipment (Form Note Damaged Equipment with Equipment Removal Form Copy 100-59-03) 100-59-03) No. 459 Install/ Equipment Remove Pole No. & Record (Form Connected 100-59-02/ Phase on Damaged Equipment Repaired Equipment 100-59-03) Junked Equipment СМО Equipment Installation Form Equipment Removal Form Damaged Equipment with Equipment Removal Form Equipment Removal Form Equipment Removal Form CMO Store Keeper Sent Burnt Equipment Issue a new Equipment Junked Equipment Issue a Repaired Equipment Repair Workshop APPENDIX-B, BREB Form 459 APPENDIX-B, BREB Form 459 B, Form 459 Equipment Installation Form Equipment Installation Form 100-59-01) Equipment Issue Card with Equipment Removal Form Equipment Removal Form Equipment Removal Form Damaged Eq. Removal Fprm Copy "JUNKED" Equipment No. suffixed "XXX" (Form 100-59-Equipment Issue Card 100-59-01 APPENDIX-CMO

Data Input into ERC Software System by Junior Engineer (ERC) of Consultant

DGM (Tech-HQ) or AGM (O&M)

PBS INSTRUCTION 100-59/ PBS INSTRUCTION 300-60: ENGINEERING AND OPERATIONS RECORD UPDATE PROCESS Revision No. Page No. Reviewed by Approved by Date of Origin **BREB** Board Page 37 of 37 2 31/10/2005 **BREB** 

Revision Date: 01/09/2013 & 19/02/2020

(Md. Mozibur Rahman)
Consultant TAPP BREE

(Md. Duhloul Islam) Consultant TAPP BRE (Md. Mozammel Huq)Md. Abdul Khaleque) onsultant TAPP BRonsultant TAPP BREI

(Debasish Chakrabortty) PD, TAPP, BREB

৬২১ তম বোর্ড সভায় অনুনোদিত সিদ্ধান্ত ন ১৭৭০০

(Kamrul Ahsan Mollik) Asst. Secy. (Board), BREB

(Md. Ahsanul Haque)

Consultant, TAPP, BREB