

QUALITY MANAGEMENT SYSTEM	POWER GRID COMPANY OF BANGLADESH LTD.					QUALITY PROCEDURES			
	TITLE: WORK INSTRUCTION FOR PREPARATION OF WHEELING BILL								
Document No:	WI-SSO-01	Revision No.:	00	Effective Date:	15/02/07	Page:	1	of	3

1. Scope : Applies to the whole of POWER GRID COMPANY OF BANGLADESH LTD.

2. Purpose: To Standardize the operation of Grid Sub-Station which stand out as an indispensable component affecting quality, stability and reliability of power system

SL. No.	Activity (including check points)	Ref. Doc.	Responsibility	Freq. /Time	Output
1.0	<b>Preparation of Wheeling Bill:</b>				
1.1	A master list of Energy meters is maintained in each sub-station containing the following information (As necessary and applicable). <ul style="list-style-type: none"> <li>• Location of the meter</li> <li>• Name of the feeder</li> <li>• Number of the meter</li> <li>• Multiplication factor</li> <li>• Correction factor</li> </ul>	QF-GMD-40	MGMD	As required	
1.2	<b>Calculation of Energy Wheeled</b>				
1.2.1	In each Grid sub-station Energy Meter readings for different feeders are taken at 12:00 PM on the first day of the month by a three member team comprising of <ol style="list-style-type: none"> <li>1. JAM on duty in the concerned Grid sub-station</li> <li>2. Representative from Energy Auditing Unit</li> <li>3. Representative from concerned Consumer</li> </ol>		DM/AM GMD	Monthly	QF-GMD-09
1.2.2	The feeder wise readings, taken in the previous month are then subtracted from that of current month to calculate the difference of reading.		-do-	-do-	
1.2.3	To calculate the feeder wise energy wheeled by the concerned Grid sub-station, the difference of reading is then multiplied by <ul style="list-style-type: none"> <li>• Respective multiplication factor and</li> <li>• Respective correction factor</li> </ul>		-do-	-do-	
1.2.4	Total energy wheeled by the concerned grid sub-station is calculated		-do-	-do-	
1.2.5	A report is then prepared showing consumer and feeder wise energy wheeled and total energy wheeled by the concerned grid sub-station.		-do-	-do-	QF-GMD-11
1.3	<b>Wheeling Bill for PBS:</b>				
1.3.1	In the office of the concerned MGMD, total unit of energy wheeled to individual PBS, resulted from different feeders of different Grid sub-stations (As applicable) is identified and Wheeling Bills are issued to concerned PBS.	QF-GMD-09 QF-GMD-11	MGMD	Monthly	QF-GMD-12
1.3.2	Concerned PBS pay the Wheeling Bill directly in the bank account of the concerned GMD as specified and directed in the bill.	QF-GMD-12	-do-	-do-	Wheeling charge is received
1.3.3	Manager of GMD prepares a report describing the amount of wheeling bill received from the PBS.				QF-GMD-13
1.4	<b>Wheeling Bill for WZPDCO:</b>				
1.4.1	In the office of the DGM, Grid Circle Khulna, a report is prepared containing the following information <ol style="list-style-type: none"> <li>1. Total unit of Energy wheeled to different PBS for which Wheeling Bills are issued.</li> <li>2. Total unit of energy wheeled through transformers of different Grid sub-stations calculated at 33kV side.</li> <li>3. Total unit of Energy wheeled to WZPDCO, which is consequently the difference of the two mentioned just above. i.e Energy wheeled to WZPDCO = Total unit of energy wheeled through transformers - Total unit of Energy wheeled to different PBS.</li> </ol>	QF-GMD-09 QF-GMD-11	DGMGRID	Monthly	QF-GMD-11

Reviewed by (GMT-1): *W. Rahman*

Approved by (DT): *[Signature]*

QUALITY MANAGEMENT SYSTEM	POWER GRID COMPANY OF BANGLADESH LTD.					QUALITY PROCEDURES			
	TITLE: WORK INSTRUCTION FOR PREPARATION OF WHEELING BILL								
Document No:	WI-SSO-01	Revision No.:	00	Effective Date:	15/02/07	Page:	2	of	3

SL. No.	Activity (including check points)	Ref. Doc.	Responsibility	Freq. /Time	Output
1.4.2	The report is then sent to DT to issue the Wheeling Bill from Head Office.	QF-GMD-11	DGMGRID	Monthly	QF-GMD-12
1.4.3	WZPDCO pays the Wheeling Bill directly in the bank account of PGCB, as specified and directed in the bill.	QF-GMD-12	-do-	-do-	Wheeling received
1.5	<u>Wheeling Bill for DESA:</u>				
1.5.1	In the office of the concerned MGMD, total unit of energy wheeled, resulted from different feeders of different Grid sub-stations (As applicable) is identified.	QF-GMD-09 QF-GMD-11	MGMD	Monthly	QF-GMD-11
1.5.2	In the office of the DGM, Grid Circle Dhaka, a report is prepared containing the following information 1. Total unit of Energy wheeled to different PBS for which Wheeling Bills are issued. 2. Total unit of energy wheeled through transformers of different Grid sub-stations calculated at 33kV side. 3. Total unit of Energy wheeled to DESCO 4. Total unit of Energy wheeled to DESA,	QF-GMD-09 QF-GMD-11	-do-	-do-	QF-GMD-11
1.5.3	The report is then sent to DT to issue the Wheeling Bill from Head Office.	QF-GMD-11	-do-	-do-	QF-GMD-12
1.5.4	DESA pays the Wheeling Bill directly in the bank account of PGCB, as specified and directed in the bill.	QF-GMD-12	-do-	-do-	Wheeling received
1.6	<u>Wheeling Bill for DESCO:</u>				
1.6.1	In the office of the concerned MGMD, total unit of energy wheeled, resulted from different feeders of different Grid sub-stations (As applicable) is identified.	QF-GMD-09	MGMD	Monthly	QF-GMD-11
1.6.2	A report is then prepared showing feeder wise energy wheeled and total energy wheeled by the concerned GMD to DESCO.	QF-GMD-11	-do-	-do-	QF-GMD-11
1.6.3	The report is then sent to DT to issue the Wheeling Bill from Head Office.	QF-GMD-11	-do-	-do-	QF-GMD-12
1.6.4	DESCO pays the Wheeling Bill directly in the bank account of PGCB, as specified and directed in the bill.	QF-GMD-12	-do-	-do-	Wheeling received
1.7	<u>Wheeling Bill for BPDB:</u>				
1.7.1	BPDB has divided its distribution area in six different zones as mentioned below 1. Mymensingh 2. Sylhet 3. Rangpur 4. Rajshahi 5. Comilla 6. Chittagong <input type="checkbox"/> There are some unit energy wheeled directly from some Power Station Bus <input type="checkbox"/> There are also some isolated generations in Comilla and Chittagong zone. <input type="checkbox"/> Energy transmitted to GK project 132kV sub-station will be booked in BPDB account. <input type="checkbox"/> Energy consumed as auxiliary of DPS generators in Khulna and Barisal division (WZPDCO area) will also be booked in BPDB account.		GM (Commercial Operation), BPDB	As required	
1.7.2	GM (Commercial Operation), BPDB issues a report, published monthly, comprising • Total unit of energy import in different distribution zones of BPDB. • Total isolated generation in different distribution zones.		GM (Commercial Operation), BPDB	Monthly	

Reviewed by (GMT-1): *W. Rahman*

Approved by (DT): *Rahman*

QUALITY MANAGEMENT SYSTEM	POWER GRID COMPANY OF BANGLADESH LTD.					QUALITY PROCEDURES			
	TITLE: WORK INSTRUCTION FOR PREPARATION OF WHEELING BILL								
Document No:	WI-SSO-01	Revision No.:	00	Effective Date:	15/02/07	Page:	3	of	3

SL. No.	Activity (including check points)	Ref. Doc.	Responsibility	Freq. /Time	Output
1.7.3	In the office of the concerned DGMGRID, following items are identified and a report is prepared <ul style="list-style-type: none"> <li>Total unit of energy wheeled through transformers of different Grid sub-stations calculated at 33kV side.</li> <li>Total unit of Energy wheeled to different PBS for which Wheeling Bills are issued.</li> <li>Total unit of Energy wheeled to organizations other than BPDB (As applicable)</li> </ul>	QF-GMD-09 QF-GMD-11	DGMGRID	Monthly	QF-GMD-11
1.7.4	Total unit of Energy wheeled to any BPDB zone is calculated from the following formula: Total Unit Energy wheeled to the BPDB zone = Total unit of energy import in the BPDB zone – Total unit of isolated generation in that zone – Total unit of Energy wheeled to different PBS in that zone (Summation of 33 kV & 11 kV energy), for which Wheeling Bills are issued by PGCB. Using the formula mentioned above Total unit of Energy wheeled to all 06(Six) individual BPDB zone is calculated	QF-GMD-11	DGMGRID	-do-	wheeling calculated
1.7.5	Total unit of Energy wheeled to BPDB zone is then calculated from the following formula: Total Unit Energy wheeled to BPDB zone = $\sum$ Total unit of energy wheeled to individual BPDB zone + $\sum$ Total unit of Energy supplied directly from Power Station Bus. ⇒ Energy supplied directly from Power Station Bus is considered as energy wheeled.	QF-GMD-11	-do-	-do-	Total wheeling calculated
1.7.6	The reports described in 4.7.2 & 4.7.3 is sent to DT by GM (Commercial Operation) BPDB and concerned DGM Grid Circle PGCB, to issue the Wheeling Bill from Head Office following the formula specified as in 4.7.4 & 4.7.5		-do-	-do-	Billing statement is issued
1.7.7	Presently, BPDB adjusts the Wheeling Bill with the outstanding debt service liability (DSL) of PGCB. After adjusting outstanding DSL, BPDB will also pay the Wheeling Bill directly in the bank account of PGCB, as would be specified and directed in the bill.	Bill issued by PGCB	DT	-do-	Wheeling charge is received/ DSL is adjusted.
2.0	The effectiveness of the work instruction for Preparation of Wheeling Bill will be evaluated and reviewed during internal audits.	QF-IQA-05 QF-IQA-06	MD, MR, Management review Committee	During internal audit	QF-MNG-01
3.0	The Management will take actions on the basis of the evaluation.		MD, DT, MR.	At least 1 time in a year	Improvement

Reviewed by (GMT-1):

*W. Rahman*

Approved by (DT):

*[Signature]*