QUALITY		POWER GRID COMPANY OF BANGLADESH LTD.						QUALITY			
MANAG SYS	EMENT TEM	TITLE: WORK INSTRUCTION FOR REQUIREMENT PLANN			NATURAL G. IING	PROCEDURES			S		
Docum	ent No:	WI-PSO-7	Revision No.:	00 Effe	ctive Date:	22/02/06	Page:	1	of	3	
4.0			a of Downer Swot	om Notwork							
1. Scop	e: Appi BAN	GLADESH LT	D.								
2. Purp	ose: 10	facilitate natur	al gas allocation t natural das red	i planning by	1 PETRO BA	NGLA by m ations and t	ieans of ime	prov	laing	]	
SL.	Activity (including check points)			Ref. Doc.	Responsib	ility Freq	Freq./ Time Ou		utpu	ıt	
No.	Netwol Cas Requirement Planning					Accounted					
1.0	Natural Gas Requirement Planning			MEMD	C Asie						
1.1	Referen	ce Information:				-					
1.1.1 1.2 1.2.1	<ul> <li>Main main main main main main main main m</li></ul>	achine / power aximum genera W. atimated mack ation wise maxi- or 24 hour insidering ap ctor. achine / power atural gas co e. quantity co quired to proce- bergy for a part ower station). Idition and/o- hedule of generation wer station). Idition and/o- hedule of generation of natural gas y) months is ma- lowing criteria: onsumption of machine/ power multaneously to pacity for one use of evening p	er station wise ation capacity in hine / power mum generation ) in MkWh, propriate load er station wise nsumption rate of natural gas luce 1 kWh of icular machine / or retirement herators in the planning requirement for ade on the basis hatural gas if all stations run o its maximum hour (As in the eak hour).	Activity Report of Chief Engineer, (Generation) PDB. & QF-LDC-21	DGMLD	C As re	quired				
	<ul> <li>Co all pr da se</li> </ul>	onsumption of machine/ oducing maxim ay (As in the o eason).	natural gas with power stations um energy for a case of summer							47	
1.2.2	Followin natural machine calculate maximu formula	g the above gas requireme power station ed /estimated m MkWh de described in cla	criteria probable ent of individual in the system is satisfying hourly mand with the nuse 1.2.3	- do-		As re	quired	QF-		•17	
1.2.3	Formula requiren running hour: Natural (Maximu Natural produce CFT/kW	a for calculating nent for indi to its maximum gas required in gas required by a 1 kWh /h.)/1000	the natural gas vidual machine capacity for one MMCFT = //W X 1 hour X y the machine to of energy in								

Reviewed by (GMSO):

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Approved by (DT):

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QUALITY	POWER GRID COMPANY OF BANGLADESH LTD.											
MANAGEMENT SYSTEM	TITLE: WORK INSTRUCTION FOR NATURAL GAS REQUIREMENT PLANNING						PROCEDURES					
Document No:	WI-PSO-7	<b>Revision No.:</b>	00	Effective Date:	22/02/06	Page:	2	of	3			

SL.	Activity (including check points)	Ref. Doc.	Responsibility	Freq./ Time	Output
No.					
1.2.4	Probable natural gas requirement of individual machine/power station in the system is calculated /estimated satisfying 24-hour maximum MkWh generation demand, with the formula described in clause 1.2.5	- do-	MEMD DMEMD	As required	QF-LDC-17
1.2.5	Formula for calculating the natural gas requirement for individual machine producing maximum energy in a day: Natural gas required in MMCFT = (Maximum energy produced in a day [24 hours] in MkWh X Natural gas required by the machine to produce 1 kWh of energy in CFT/kWh).		MEMD DMEMD	As required	
1.2.6	Generators are then grouped according to their probable gas supplier entity.			As required	
1.2.7	Probable total natural gas requirement from individual gas entity is then calculated, satisfying both hourly maximum MkWh and 24-hour maximum MkWh generation demand condition, by the following formula Natural gas requirement for machines for a gas supplier entity = $\Sigma$ Natural gas requirement of individual machines under that gas supplier entity.		MEMD	As required	
1.2.8	A report will be prepared and duly signed by DMEMD and MEMD		MEMD DMEMD	As required	
1.2.9	The report will be sent to "Petro Bangla" for further action.		MEMD DMEMD	As required	
1.3	Short term requirement planning				
1.3.1	Natural gas requirement planning prepared for 60(Sixty) months will be updated twice in a year (i.e. updated for every 06(Six) months)		DGMLDC MEMD	As required	
1.3.2	<ul> <li>Before calculating natural gas requirements it is needed to update the following information.</li> <li>Addition and/or retirement of generators (If any)</li> <li>Machine / power station wise maximum generation capacity and efficiency (If changed)</li> <li>The variation of system demand due to season change. (If applicable)</li> </ul>		MEMD DMEMD	As required	

June 12:

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MANAGEMENT System	TITLE	: WORK INSTRU REQUIREM	CTION ENT F	I FOR NATURAL G PLANNING	AS	PRO	CEL	OURE	S
Document No:	WI-PSO-7	Revision No.:	00	Effective Date:	22/02/06	Page:	3	of	3

SL. No.	Activity (including check points)	Ref. Doc.	Responsibility	Freq./ Time	Output
1.3.3	Probable natural gas requirement of individual machine/power station in the system is calculated /estimated satisfying hourly maximum MkWh demand with the formula described in clause 1.2.3	- do-	MEMD DMEMD	As required	QF-LDC-17
1.3.4	Probable natural gas requirement of individual machine/power station in the system is calculated /estimated satisfying 24-hour maximum MkWh generation demand, with the formula described in clause 1.2.5	- do-	MEMD DMEMD	As required	QF-LDC-17
1.3.5	Generators are grouped according to their probable gas supplier entity.		MEMD DMEMD	As required	
1.2.7	Probable total natural gas requirement from individual gas entity is then calculated, satisfying both hourly maximum MkWh and 24-hour maximum MkWh generation demand condition, by the following formula Natural gas requirement for machines for a gas supplier entity = $\Sigma$ Natural gas requirement of individual machines under that gas supplier entity.		MEMD DMEMD	As required	
1.3.7	A report updating the natural gas requirement will be prepared and duly signed by DMEMD and MEMD		MEMD DMEMD	As required	
1.3.8	The report will be sent to "Petro Bangla" for further action.		MEMD DMEMD	As required	
2.0	The effectiveness of the work instruction for Preparation of Generation Schedule will be evaluated and reviewed during internal audits.		Management Review Committee, MR.	During internal audit	Review of review system
3.0	The Management will take actions on the basis of the evaluation.		MD, DT, MR.	At least 1 time in a year	Improvement

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