SL. No.	Activity (including check points)	Ref. Doc.	Responsibility	Freq. /Time	Output
1.0	Generation Schedule: The Generation Schedule is the detailed description of the hourly loading status of the generating units which is made to facilitate improved performance in load despatching. The Despatcher accomplishes the following tasks being in accord with the generation schedule. ■ Loading of the generating units ■ Synchronization of oil fired machines at about approximately 30 minutes before the light hour starts (Normally the time of the sun set) or as needed by the system. ■ Shut down of oil fired machines after peak hour or as needed by the system. ■ Shut down of other Natural Gas fired machines as needed by the system etc.		DMEMD	As required	
1.1	Reference information:				
1.1.1	To prepare the generation schedule following information is needed. (i) Available generation units of that power station for that day. (ii) Probable maximum generation of the machines for that day. (iii) Information about the limitation of generation / limitation on variation of load (if any). (iv) Probable time of Synchronization of the machines (if applicable). (v) Limitation in the transmission network (if any). (vi) Probable voltage problem in a zone due to MVAR demand, etc. (vii) Limitation of natural gas / liquid fuel supply.	QF-LDC-07	DMEMD	As required	Input is set
1. 2	Hourly demand planning:				
1.2.1	To preparation the generation schedule hourly demand is assessed on the basis of the following: (i) Working day or holiday (ii) Season and Weather condition (iii) Previous days demand condition (iv) Existence of any emergency situation, etc.	QF-LDC-01 QF-LDC-06	DMEMD	As required	Requirement is identified

SL. No.	Activity (including check points)	Ref. Doc.	Responsibility	Freq. /Time	Output
1.3	Time frame of Generation Schedule:				
1.3.1	Generation schedule will be prepared for a time of 24 hour starting from 16:00 hour of the day the schedule is being prepared to the 15:00 hour of the next day.	QF-LDC-15	DMEMD	As required	
1.4	Basic principle of loading different type of Generators:				
1.4.1	*Hydro Generators:* ■ Except dry season, available Hydro machines should be run as much as possible in such a way that the Head water level of the Reservoir remains at or below the level of Rule curve as far as possible. ■ In rainy season, all the available Hydro machines should be run round the clock at maximum load. ■ In dry season, the available Hydro machines should be run as a peaking machine or as directed time to time.	QF-LDC-07 QF-LDC-02	DMEMD	As required	Operation strategy for Hydro machines are set.
1.4.2	*Liquid fuel fired generators:* ■ Normally liquid fuel based machines comprising of Gas Turbines and Diesel engines are fired only to meet the evening peak demand. So those machines should be fired about 30 minutes before the light hour, but it should be noted that in a cloudy day the light hour comes about 25-45 minutes ahead of normal light hour depending on the season and the firing time to be adjusted accordingly. ■ Liquid fuel based steam units will run in its minimum possible load during off peak hours while taking care of the voltage condition in the respective area and the limitation (if any) of transmission line loading.	QF-LDC-07 QF-LDC-02	DMEMD	As required	Operation strategy is set for Liquid fuel fired machines.
1.4.3	*Natural Gas (NG) fired Gas turbines:* ■ Normally NG fired Gas Turbines should be loaded to their maximum to meet the peak hour demand (both day & evening peak) in the system. ■ In the off peak hours, depending on the demand in the system, they will run at a lower load or will be kept shut down and before light hour they will be fired again.	QF-LDC-07 QF-LDC-02	DMEMD	As required	Operation strategy is set for Natural Gas fired machines.

SL. No.	Activity (including check points)	Ref. Doc.	Responsibility	Freq. /Time	Output
1.4.4	*Natural Gas (NG) fired Steam plants & Combined Cycle units:* ■ Normally steam plants and Combined Cycle machines should be run as base load plants. ■ They should be loaded to their maximum to meet the peak hour demand (both day & evening peak) in the system. ■ In the off peak hours, depending on the demand in the system, they will run at a lower load. ■ When the system demand becomes extremely low (As in the case of the holiday for Eid-Ul-Fit'r and Eid-Ul-Azha where the holiday continues for 4-6 days in stretch), some selected steam and/or Combined Cycle units (One Gas turbine for 2GT/1ST type Combined Cycle units or the whole 1GT/1ST type Combined Cycle unit are kept shut down (As needed) to meet the challenge of extremely low system demand. ■ Prior approval is needed for the shut down of steam and combined cycle plants due to low system demand.	QF-LDC-07 QF-LDC-02	DMEMD	As required	Operation strategy is set for Combined Cycle machines.
1.5	Steps to be followed while preparing the Generation Schedule:				
1.5.1	Collect all reference information as described in clause 1.1.1		DMEMD	As required	
1.5.2	Check for any other specific direction from DGMLDC/GMSO, regarding the limitation in the system and/or loading of hydro or liquid fuel fired machines.	QF-LDC-06	DMEMD	As required	
1.5.3	Prepare hourly demand plan following guideline as in clause 1.2.1.		DMEMD	As required	
	Follow schedule duration described as in clause 1.3.1.		DMEMD	As required	
1.5.4	The loading of the generators will be varied following the economic order (QF-LDC-21) and the operating condition of the machines as described in clause 1.1.1 (ii), (iii) & (iv)		DMEMD	As required	
1.5.5	Follow instruction 1.4.1 to 1.4.4 for loading of different types of generators (Depending on system condition).		DMEMD	As required	

SL. No.	Activity (including check points)	Ref. Doc.	Responsibility	Freq./Time	Output
1.5.6	After finishing the preparation of the generation schedule, it will be duly signed and approved by DMEMD and MEMD respectively. The schedule will then be sent to LDC control room for implementation within 16:00hr.		DMEMD	As required	QF-LDC-15
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