MINUTES OF THE 67th SLCF MEETING HELD ON 23/09/2022

Shri. G. Nayak, Chief Engineer (SLDC), WBSETCL& Chairman, SLCF welcomed all the participant members to the 67thSLCF meeting held at SLDC conference room.

ITEMNo:1. CONFIRMATION OF THE MINUTES OF 66th SLCF MEETING HELD ON 07.07.2022.

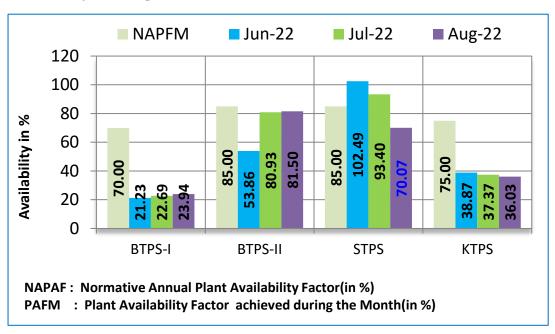
The minutes were circulated vide memo no: **SLDC/How/EA-18/2021-22/396(1-37)** dated 16/08/2022.

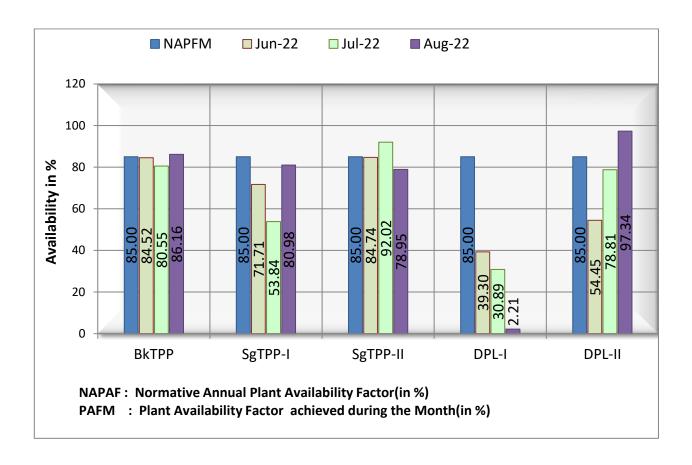
The minutes of the **66th SLCF** meeting was taken as accepted.

ITEM No: 2. REVIEW OF STATE GRID PERFORMANCE:

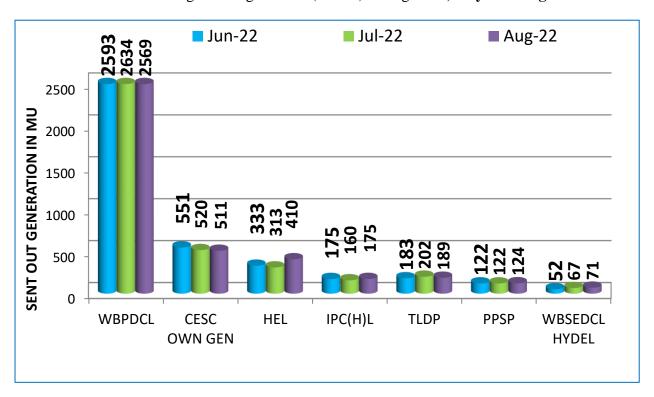
Divisional Engineer, SLDC delivered a Power point presentation on the grid performance based on operational statistics for the period of **June**, **July and August-22**. A critical analysis on the **June**, **July and August-22** grid performance reveals the following:

2.1 Availability of WBPDCL power plants in terms of *NAPAF &*PAFM for the month of **June**, **July and August-22** are as follows:

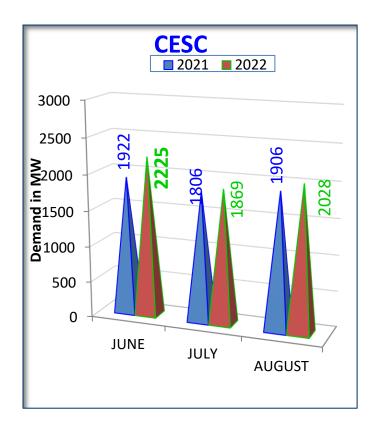


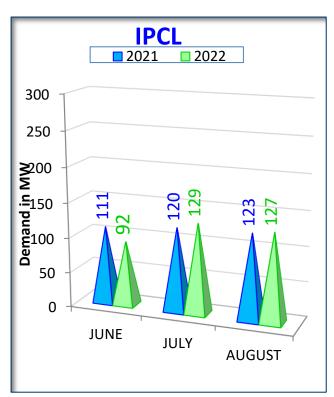


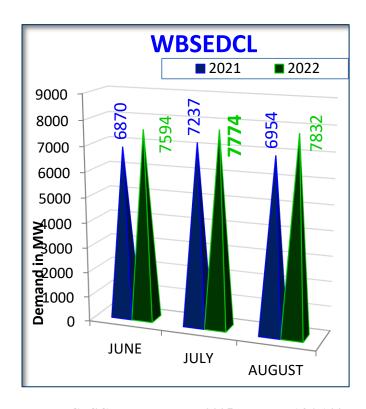
2.2 Sent out Generation of generating stations (in MU) during June, July and August-22.

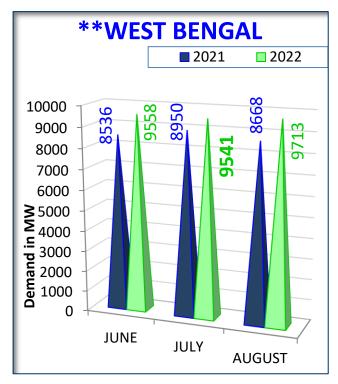


2.3 The Maximum demand (potential) in MW and their time of occurrence during **June**, **July and August-22** were as follows:



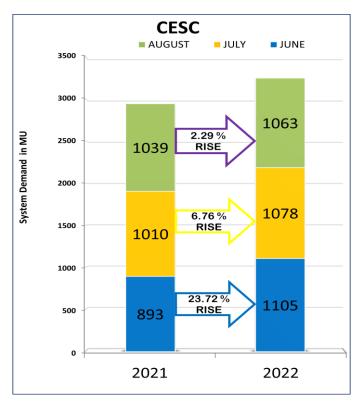


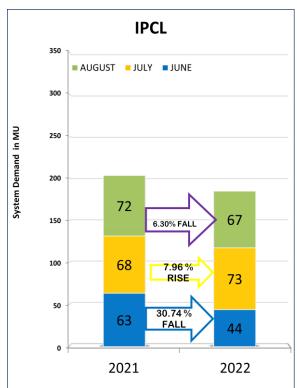


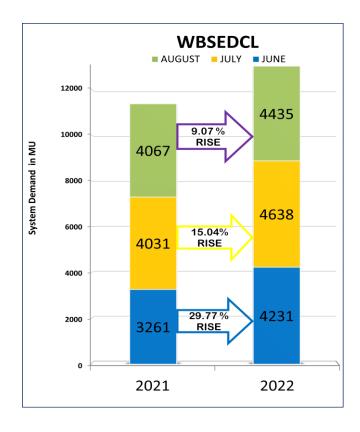


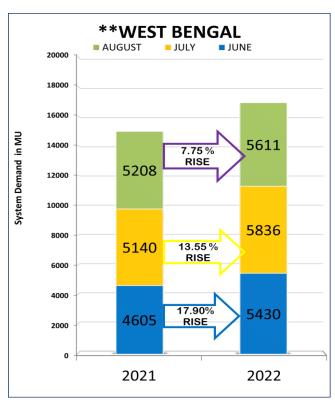
- CESC peak demand 2225 MW, on 14.06.22 at 1600 hrs.
- IPCL peak demand 129 MW, on 30.07.22 at 1600 hrs.
- WBSEDCL peak demand 7832 MW, on 17.08.22 at 23:00 hrs.
- WEST BENGAL peak demand 9713 MW, on 17.08.22 at 23.00 hrs

2.4 The system demand (potential) in MU during **June**, **July and August-22** were as follows:

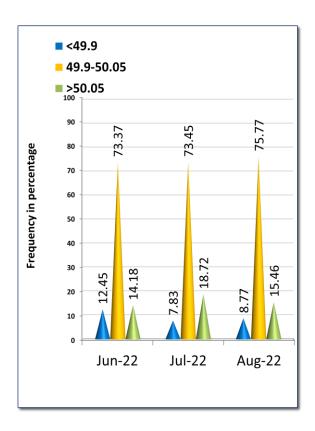








• The frequency profile during **June**, **July and August-22** were as follows:



MAXIMUM FREQUENCY

JUNE-22: 50.36 HZ. On 19.06.22

JULY-22: 50.30 HZ. On 03.07.22

AUGUST-22:50.31 HZ. On 15.08.22

MINIMUM FREQUENCY

JUNE-22: 49.48 HZ. On 13.06.22

JULY-22: 49.42 HZ. On 18.07.22

AUGUST-22: 49.47 HZ. On 16.08.22

ITEM No. 3. IMPORTANT GRID INCIDENTS:

S 1	Date	Element tripped	Details	Normalization/Load
No				loss
1	14.07.22	132KV NBU-	132Kv NBU-UJANU ckt tripped	132Kv NBU-
		UJANU,132KV	at both end, all other circuit got	UJANU ckt
		NBU-SLG(PG)	tripped from far end only, no	normalized at 14.07
		and 132Kv NBU-	tripping at NBU end.	hrs on 14.07.22.
		TCF PSI all	Relay 132Kv NBU-UJANU ckt:-	132Kv NBU-
		circuits tripped	NBU=Trip phase ABC,Z1,Active	SLG(PG) ckt and
		simultaneously.	Gr-1,started phase A-B,dist	132Kv NBU-TCF
			3.12KM,Ia=8.492KA,Ib=8.075KA	PSI ckt normalized
			UJANU=Z1,3.8KM,A-B Phase,Ia-	at 13.04 hrs and
			3.9 KA,Ib-3.8 Ka.	14.05 hrs
				respectively.

Deliberation:

Representative of WBSETCL stated that the fault was in the 132KV NBU-Ujanu ckt. The far end trippings of 132KV Siliguri(PG)-NBU and 132KV TCF-NBU ckt may have happened due to delayed trippings of the 132KV NBU-Ujanu ckt.

The Forum requested WBSETCL testing department to go through the DR and event logger details and take necessary measures to ensure that such type of cascaded trippings are avoided in the upcoming festival days.

2	14.07.22	220KV APDR-	Bus Bar protection operated,96C	220KV APDR-
		APDR(PG)#2 got	at PG end. No Tripping at APDR	APDR(PG)#2
		tripped during	end as reported.	normalized at 18.18
		normalization of		hrs on 17.07.22.
		220kV APDR-		220KV APDR=-
		APDR(PG)#1		APDR(PG)#1 till
		after shutdown		date under
		work.		breakdown.

Deliberation:

Representative of WBSETCL deliberated that during switching on the Main Bus Isolator of the 220 KV Alipurduar-Alipurduar(PG) ckt 1 at Alipurduar(WB) end a flashover in the GIS switchgear was observed resulting in Bus fault at Alipurduar(PG) end. OEM visit has been completed. The timeline given is approximately four months from the placement of LOA. As the Defect Liability Period is over and the replacement cost is of a considerable amount, ongoing negotiations regarding the final cost is taking some time.

The Forum opined that unavailability of the 220KV Alipurduar(PG)-Alipurduar(wb) #1 has made the North Bengal EHT network very vulnerable as 132KV Birpara-alipurduar & 132KV Birpara-Coochbehar ckts have been decommissioned. Effort must be given to expedite this case so that the 220KV Alipurduar(PG)-Alipurduar(WB)#1 can be put into service at the earliest.

3	23.07.22	At KLC 220Kv	B-Phase LBB of 220Kv N.TOWN	Load Loss-52 MW
		Sub-Station at	AA-III CKT at KLC end operated	from 08.46 hrs to
		08.46 hrs all 220	and all elements got tripped with	10.11 hrs. System
		KV CB's got	LBB operation.	normalized at 10.11
		tripped with LBB		hrs on 23.07.22 via
		relay operated		220Kv KLC-
		and resulting total		S'GRM(PG) ckt &
		power failure at		160 MVA Tr#1.
		KLC Substation.		

Deliberation:

Representative of WBSETCL stated that the LBB relay mal-operated due to short circuit in the LBB relay casing. Necessary corrective actions have been taken to avoid such occurances.

4	27.08.22	At SALT LAKE	132KV KSBA-SLT STD#2 relay	SALT LAKE AIS
		STADIUM at	indications:	LOAD LOSS 77
		13.06 hrs on	KSBA=13.77 KM, O/C, 2.4 KA,	MW from 13.07 hrs
		27.08.22 132Kv	8.9 KA, 8.2 KA	to 13.17 hrs and
		SLK STD-	SLT STD=PSV OPD.	SALT LAKE
		KSBA#2 was	132KV KSBA-SLT AIS #1 Relay	STADIUM load loss
		tripped (#1	indications:	06 MW from 13.07
		already switched	KSBA=ABC, 21.75 KM, Z2, .9	hrs to 14.15 hrs by
		off to facilitate ½	KA, .97 KA, .9 KA	diversion of loads to
		main bus	132KV KSBA-SLT AIS-KLC	alternate source.
		shutdown at	Relay indications:	
		KASBA) and	KSBA=ABC - N, Z1, 50.83 KM,	
		132Kv KSBA-	.78 A, .83A, .76A	
		SLK AIS D/C		
		tripped from		

KSl	BA end only	
re	sulting no	
pov	ver at SALT	
	LAKE	
ST	'ADIUM &	
SAL	T LAKE AIS	
	ubstation.	

Deliberation:

Representative of WBSETCL stated that due to 132KV VT fail at 132KV Salt Lake Stadium all incoming circuits of 132KV Salt Lake Stadium and 132KV Kasba-salt lake AIS s/s got tripped.

132KV KSBA-SLT STD#2 tripped with O/C as the said line has Line differential protection. The fault was beyond the zone of Line differential.

5	09.09.22	At LILUAH	Liluah informed SLDC after	CESC Load
		132Kv	switching off the circuits that due	Loss=52 MW
		substation:	to flashing observed from Y-Ph	
		132Kv LLH-	Main Bus isolator of the said ckt,	
		CESC #3	they compelled to switch off the	
		switched off at	ckt.	
		09.05 hrs without		
		taking any		
		consent from		
		SLDC resulting		
		load loss in		
		CESC system.		

Deliberation:

Representative of WBSETCL deliberated that huge flashing was observed in the Y-phase Main Bus side isolator of the 132 KV Liluah-CESC ckt .Therefore, the circuit had to be switched off to avoid greater hazard.

On enquiry from ACE-I, SLDC regarding thermal scanning schedule of Liluah 132KV SS, representative of WBSETCL stated that the thermal scanning is being done on a monthly basis but this particular hot spot was not detected.

Representative of CESC stated that the load loss in this instant was 77MW and not 52MW.

ACE-I, SLDC further added that as the Liluah import of CESC is radial in nature, it is of utmost importance to detect such hotspot in advance so that sufficient time is available for shifting of loads so that interruption is minimized. He also requested CESC to explore ways in facilitating alternate sources and reduce the single source dependency of all the CESC loads fed radially from STU so that these interruption time can be minimised in future.

6	13.09.22	At TITAGARH	Relay details:	WBSEDCL load
		substation,132Kv	DMP end= Not tripped.	LOSS=36 MW
		TTG-DMP D/C	TTG end= No Relay	CESC LOAD
		got tripped at	-	LOSS=31 MW
		16:38 hrs without		TRACTION LOAD
		any relay (as		LOSS=04 MW
		reported)		From 16.38 hrs to
		_		16.44 hrs.

Deliberation:

Representative of WBSETCL deliberated that this tripping was due short circuit of DC circuit in the Under frequency and Traction panel. The problem has been rectified by the

ITEM No: 4. OPERATIONAL PLANNING:

(A) ANTICIPATED POWER SUPPLY POSITION FOR THE MONTH OF OCTOBER-22, NOVEMBER-22 AND DECEMBER-22 [All concerned are requested to furnish anticipated demand and generation forecast for these months to SLDC]

Description	OCTOBER-22	NOVEMBER-22	DECEMBER-22
WBPDCL			
S/O	3300	3300	3300
Generation			
WBSEDCL			
Own	7000*	5665*	5175*
Maximum	7000	3003	31/3
Demand			
CESC			
Maximum	1890	1750	1430
Demand			
CESC Own			
gen. + HEL	700+ 540	460 + 540	460+540
(S/O)			
DPL Generation			
Availability	450	450	220
(GROSS)			
IPCL demand			
connected to	85-90	85-90	85-90
J.K.Nagar			
system			

^{*--}AS PER LGBR

(B) SETTLEMENT OF SHUT DOWN PROPOSALS FOR THE MONTH OF OCTOBAR-22, NOVEMBER-22 AND DECEMBER-22 .i.r.o GENERATING UNITS, TRANSMISSION LINES AND OTHER EQUIPMENTS.

UNIT	DURATION	REMARKS
BkTPP U#3	23.11.2022 to 17.12.2022	Boiler Overhauling
DPL U#8	01.12.22 to 31.12.22	Boiler Overhauling
Budge Budge Unit#1	04.11.22 to 29.11.22	Overhauling
Budge Budge Unit#2	11.12.22 to 07.12.22	Maintenance Job
Budge Budge Unit#3	09.12.22 to 30.12.22	Overhauling

Southern Unit#2	07.10.22 to 21.10.22	Overhauling

ITEM No: 5. AGENDA NOTES PUT UP BY SLCF MEMBERS FOR DISCUSSION:

5.1. Agenda note put up by STPS

Tentative program of shutdown/maintenance of outgoing feeders/equipments:

At STPS 100 MVA OLD TIE Transformer will be replaced by NEW 130 MVA transformer. For this job 25 days shutdown of 100 MVA transformer is required. Exact commencement date will be intimated later. No power interruption is anticipated as total load will be carried by NEW 130 MVA TIE transformer.

Deliberation in the meeting:

ACE,SLDC stated that in view of the festive season and expected load the above stated shutdown program may be permitted after Kalipuja. It was also suggested from SLDC that the shutdown should be commenced as early as possible within the Winter period.

5.2. Agenda note put up by SLDC

1. 1 DPL representative was requested on 65th & 66th SLCF meeting to submit data (Technical minimum load, household load with which it can give stable performance in order to initiate islanding scheme) related to their units in view of proposed islanding scheme with one unit of DPL. Also, they were requested to specify the operation limit of frequency range of the units (higher side and lower side). But no information from DPL is received as yet.

Deliberation in the meeting:

Representative of DPL provided the data. The Forum requested DPL to provide the same through an official mail at the earliest.

ACE-I, SLDC pointed out that in order to plan a successful islanding scheme individual consideration of both Unit#7 and Unit#8 needs to be done as it may happen that during any given event only 1 no. of Unit of DPL may be on bar. Therefore, the said data of both Units must be shared for further necessary action in this regard.

2. Unit wise MVAR performance for the month of August'2022.

In earlier SLCF meetings, SLDC highlighted the issue of inadequate reactive power absorption by generating units during the high voltage condition. Due to inadequate reactive power absorption by generating units, huge MVAR charges results due to dominating leading VAR in the state system during light load hours.

Reason for poor performance during AUGUST'22 may be shared.

Deliberation in the meeting:

ACE-I, SLDC, through a ppt presentation elaborated the performance of the State generators during August 2022. Almost all state sector generators could not match their performance as per their respective capability curves. He added the following:

- I) DPL as a generating station needs to improve their performance drastically. It was seen that the DPL generators actually generated huge amounts of reactive Mvar instead of absorbing during high voltage scenario.
- II) HEL who was once the best performer regarding the Var performance has considerably faltered in this regard. The forum requested representative of CESC

to take up the matter with HEL. As their performance is pivotal in determining the quantum of reactive penalty which CESC along with WBSEDCL & IPCL.

The forum requested the representatives of the generating plants that this issue regarding the reactive Var performance is being deliberated since long. Though marginal improvement has been noticed in few machines but most are far from realizing their full potential. Due to this under-performance the state experiencing valuable cash outflow. This is the opportune moment to step up the game and perform as per their rated capacities otherwise it may have consequences.

3. In view of MVAR control measures at the end of OCTOBER month when overall declining trend of load is observed it may be required for techno economical consideration/requirements to change the GT taps, so all WBPDCL representatives are requested to deliberate their specific proposal including GT tap changes (if felt needed) for effective MVAR control measures for upcoming winter month.

Deliberation in the meeting:

ACE-I, SLDC deliberated that as winter is approaching and the performance of most state generators needs drastic improvement it is doubly important for the generators to asses the P-Q limiter settings and the Tap positions of the GT 's so that the generators can deliver the best reactive performance as per their respective capability curves.

He went on to add that ALDC, WBSEDCL has already been consulted and they have agreed to allow shutdowns for generators needed to optimise the P/Q limiter settings at first and if it fails to achieve the goal then changing of GT tap positions needs to be done as per a predetermined schedule.

Representative of WBPDCL stated that that the P/Q limited settings have been changed for SGTPP Stage-I rest will be assessed and informed accordingly.

The forum requested all the generating stations to complete their assessment and inform SLDC regarding the shutdown schedules of the generators within 10 days.

4. Implementation Status of SAMAST Project of West Bengal SLDC.

Deliberation in the meeting:

On this issue, ACE, CTD, WBSETCL gave up to date status of the First phase of SAMAST Project which includes installation of meter and AMR facility to SLDC server. It was deliberated that by 4th July,22 KTPS and BTPS got their meters and DCU and by 08/09/22 STPS, BkTPP and SgTPP got their meters and DCU which needed to be erected by concerned PDCL generating Stations. Only installation of AMR facility and commissioning of meters will be done under supervision of CTD, WBSETCL. It was also delivered that tentative date for reaching all meter data to SLDC through AMR facility is November, 2022 and to maintain the schedule all concerned was requested to deliver their job accordingly. CESC was also requested to explore the possibility of sending meter data to SLDC through AMR facility.

ITEM No:6. Date and venue of next SLCF (i.e. 68TH) Meeting.

Will be decided at a later date.

ITEM No: 7. MISCELLANEOUS:

(a) Inaccurate and intermittent SCADA data:

The SCADA data i.r.o. the following CTU interconnected tie line and State generating units are are yet very often found intermittent.

- a. STPS sent out
- b. 400 KV Sagardighi-Farakka tie line.

Deliberation in the meeting:

ACE, Howrah Communication, WBSETCL informed that there is a problem in the transducer i.r.o STPS sent out generation which will be replaced by Communication Dept., WBSETCL shortly.

Regarding 400 KV Sagardighi-Farakka tie line Power Grid has already taken up the matter.

(b) Dismantling of communication wave-trap at BTPS:

Deliberation in the meeting:

In continuation of the discussion which was held in 66th SLCF meeting, as suggested by BTPS for dismantling of existing communication Wave trap and other associated equipments, ACE, Howrah Communication, WBSETCL has gave concurrence and said that there is no issue in this regard and the job of dismantling and removal may be initiated. However, the forum suggested to complete the job by December, 22.

(c) Shut down for Boiler License Renewal:

Deliberation in the meeting:

The Forum requested all the generators to explore avenues so that the shutdowns of Machines due to Boiler License renewal may be clubbed within the lean periods of the year.

Representative of WBPDCL and DPL agreed to take up the matter with their higher authorities.

(d) Unequal Voltages in the 132KV Titagarh SS bus:

Deliberation in the meeting:

Representative of CESC stated that unequal 132KV bus voltages(phase wise) is being observed since 30 to 45 days at the Titagarh Import point which is varying from 1KV to 3 KV. The unequal nature is of intermittent nature. As a result of which the 33KV Bulk consumers viz Electrosteel have lodged their concern with CESC.

The Forum requested WBSETCL to take up the matter in consultation with the concerned testing department to find the cause of this anomaly so that further action can be initiated.

CE,SLDC,WBSETCL

Minutes for 67th SLCF meeting

Annexure -1

• The new Transformers, EHT lines and equipments commissioned during the periods of **June, July and August-22**. were as follows:

New Transmission lines & Equipments

Sr	New Element	Date of charging	Remarks
No			
1	132KV KONA-LLH #1 & #2	On 26.07.22 at 16:54 hrs & 17:03 hrs respectively	OLD 132Kv RISHLLH D/C LILO at newly commissioned 132KVKONA GIS
2	132KV KONA-RISH	On 28.07.22 at 15:03 Hrs	SUBSTATION
3	132KV KONA-DANKUNI	On 28.07.22 at 15:30 Hrs	
4	At 132KVKONA Sub-stn, 50	On 27.07.22 at 17:02 Hrs,19:26 Hrs	
	M VA Tr#1, Tr#2 & Tr#3	& 17:25 Hrs respectively	
5	132KV SONARPURRENIA #1	On 29.07.22 at 20:11 Hrs	OLD 132Kv SNPRBEHALA D/C LILO at newly
7	132KV BEHALARENIA #1	On 29.07.22 at 20:01 Hrs	commissioned 132KV RENIA GIS SUBSTATION
8	132KV SONARPURRENIA #2	On 04.08.22 at 16:48 Hrs	
9	132KV BEHALA-RENIA #2	On 04.08.22 at 17:01 Hrs	

New Transmission lines & Equipments

Sr	New Element	Date of charging	Remarks
No			
9	220KVARM-BM Single Ckt.	08.09.22 & 14.34 Hrs	220KVArambag – New Chanditala Ckt LILO at newly commissioned 220KV BM GIS
10	220KV New CHANDITALA- BM Single Ckt.	08.09.22 & 14.49 Hrs	Substation.
11	At 220KV BM Sub-stn, 220/132KV,1 60 M VA TR#1 & TR#2	On 08.09.22 & 14.54 Hrs & 14:55 Hrs respectively	
12	132 KV Subhasgram – Minakha #1 & #2	31.07.22 & 18:10 Hrs & 18:11 Hrs	132 KV Minakha GIS substation newly commissioned
13	At 132KVM inakha sub-stn, 132/33KV,50 M VA TR#1 & TR#2	On 09.09.22 at 13.20 Hrs & 13:21 respectively	

Memo No. SLDC/ How/ 109/ 2022-23/742 (1-37)

Copy for information please:-

- 1. The Secretary, WBERC, Plot AH/5(2nd& 4th floor), MAR 16-1111, AA-1A, Newtown, Rajarhat-700163
- 2. PS to Managing Director, WBSETCL, Vidyut Bhavan, Kolkata-91.
- 3. PS to Managing Director, DPL, Kolkata -107.
- 4. PS to Director (Operations), WBSETCL, Vidyut Bhavan, Kolkata-91.
- 5. PS to Director (RT), WBSEDCL, Vidyut Bhavan, Kolkata-91.
- 6. PS to Executive Director (OS), WBPDCL, Salt Lake City, Kolkata-700 098.
- 7. C.E, SLDC, WBSETCL, Howrah-09.
- 8. C.E, Transmission (O & M)-I, WBSETCL, Vidyut Bhavan, Kol-91.
- 9. C.E, Transmission (O & M)-II, WBSETCL, Vidyut Bhavan, Kol-91.
- 10. C.E, CTD, WBSETCL, AbhiksanBhavan, Kol-91.
- 11. C.E, Communication, WBSETCL, AbhiksanBhavan, Kol-91.
- 12. Chief Engineer, CLD, DVC, Howrah.
- 13. C.E.(PTP) WBSEDCL, Vidyut Bhavan, Kolkata-91.
- 14. G.M., (SO) CESC Ltd., Statesman House, Kol- 01.
- 15. G.M. BTPS, WBPDCL.
- 16. G.M. STPS, WBPDCL.
- 17. G.M. KTPP, WBPDCL.
- 18. G.M. BKTPP, WBPDCL.
- 19. G.M. SGTPP, WBPDCL.
- 20. Sri I. B. Chakraborty, Vice-President, Engineering & Projects, IPCL
- 21. Addl. Chief Engineer, SLDC, WBSETCL, Howrah-09.
- 22. Addl. Chief Engineer, Communication (Howrah), WBSETCL, Howrah-09.
- 23. Addl. Chief Engineer, ALDC, WBSEDCL.
- 24. Sri P. Gupta, DGM, WBPDCL.
- 25. Sri A. Sen Gupta, DGM, System Control Department, CESC Ltd, CESC House, Kol- 01.
- 26. Sri S. K. Sarkar, G.S.(T&D, Load Management), DPSC Ltd.
- 27. Sri R. Biswas, Sr. Manager, ALDC, DPL.
- 28. Sri Goutam Bose, Sr. Manager & HOD (Operation), KTPP WBPDCL,
- 29. Sri Indrajit Banerjee, Manager(Operation), KTPP WBPDCL.
- 30. Sri D. Chanda, Sr. Manager (PS), BKTPP, WBPDCL.
- 31. Mr. Joynal Abedin, Sr.Manager(E.O.), BKTPP, WBPDCL.
- 32. Sri K. Banerjee, Manager, System Control Department, CESC Ltd, CESC House, Kol- 01.
- 33. Sri A.Biswas, Manager(PS), BKTPP, WBPDCL.
- 34. Sri F. Hossain, Manager (PS), SGTPP, WBPDCL.
- 35. Sri M.S.Bapari, Manager (PS), SGTPP, WBPDCL.
- 36. Sri M. Mallik, Sr. Manager, (System Operation Electrical), BTPS, WBPDCL.
- 37. Sri S. Maiti, Sr. Manager (O), STPS, WBPDCL.

Convenor, SLCF

Dated: 24/11/2022

Minutes for 67th SLCF meeting