

MINUTES OF THE 20th SLCF MEETING HELD ON 27.05.2011.

The 20th SLCF meeting was held on 27.05.11 at conference room, SLDC. The meeting was chaired by Shri. D. Chakraborty, Chief Engineer (SLDC), WBSETCL. He welcomed all the participant members of the forum.

ITEM-1: CONFIRMATION OF THE MINUTES OF THE 19th SLCF MEETING HELD ON 23/03/11.

The minutes of the 19th SLCF meeting was circulated vide memo no: SLDC/How/109(SLCF)/357(1-18) dated 26/03/2011 and the same was also published in the website (www.wbsetcl.in/slhc.html).

The Members of the forum confirmed and passed the minutes.

ITEM-2 : REVIEW OF STATE GRID PERFORMANCE :

(a) Power point presentation on Grid Performance for the month of MAR '11 & APR '11.

SLDC, made a Power point presentation on the grid performance based on operational statistics for the period Mar-2011 & Apr-2011. A Critical analysis on the grid performance reveals the following:

- *It was observed that during April-2011, almost all power plants of WBPDCCL except BTPS achieved their target availability as prescribed in the Terms & Conditions of Tariff Regulation 2011.*
- *Distribution companies like WBSEDCL and CESC Ltd. showed decrease in their system potential in the month of March and April w.r.t same period of last year. The decrease in system potential during the current year was mostly due to the frequent nor'westers and relatively cool weather w.r.t to last year.*

Whereas DPL showed a decrease in their System Potential during March and increase in system potential during April w.r.t same period of last year.

- *The peak demand during the period under review were:*

CONSTITUENT	Peak Demand (Potential)	
	Mar-11	Apr-11
WBSEDCL	<i>4260 MW on 23.03.2011 at 19.00 hrs.</i>	<i>4345 MW on 08.04.2011 at 20.00 hrs.</i>
CESC	<i>1513 MW, on 22.03.11 at 18.30hrs.</i>	<i>1602 MW on 18.04.2011 at 18.45h hrs.</i>
DPL	<i>301 MW on 20.03.11 at 21:00 hrs.</i>	<i>318 MW on 02.04.11 at 06:00 hrs.</i>

- *System met and system Potential of distribution licensees during Mar-11 & Apr-11 were as below :*

<i>CONSTITUENT</i>	<i>Mar-11</i>		<i>Apr-11</i>	
	<i>System Met (MU)</i>	<i>System Potential (MU)</i>	<i>System Met (MU)</i>	<i>System Potential (MU)</i>
<i>WBSEDCL</i>	2303.683	2309.808	2224.081	2231.051
<i>CESC</i>	758.734	759.357	816.319	816.740
<i>DPL</i>	159.368	173.653	147.324	24.225

ITEM -3 : IMPORTANT GRID INCIDENTS.

- (a) On 12.04.11 at 14.14 hrs, total power failed at NBU sub-station due to tripping of all ckts from far end.**

At 14.14 hrs of 12.04.11 all outgoing 132 kV feeders of NBU & Lebong substation tripped causing power failure at NBU and Lebong sub-station. NBU received power from 220 kV Siliguri(PG) sub-station at 14.25 hrs and Lebong received power from NBU at 16.55 hrs. The restoration got delayed due to communication failure. It was revealed from the deliberation of WBSETCL representative that the tripping resulted probably due to lack of relay co-ordination. An expert team of WBSETCL will shortly inspect the place and take necessary action so that the reoccurrence of the same can be avoided in future.

- (b). On 04.05.11 at 09.52 hrs east side main bus of BTPS got dead through bus-bar differential relay. The same incident also occurred on 24.04.11 on 16.23 hrs .**

As no representatives from BTPS were present, no deliberation was made on issue and the cause of incident could not be ascertained.

- (b) On 10.05.11 due to tripping of 220 kV STPS-Durgapur ckt and 220 kV Durgapur-Asansol ckt at 12.10 hrs, total power failed at Asansol substation and STPS. As a result STPS unit # 5, the only running unit of STPS got out of bus. The running unit of CPL also tripped.**

It was revealed from the deliberation of WBSETCL representative that the 220 kV Asansol-Durgapur ckt actually tripped at 11.55 hrs and 220 kV Durgapur-STPS ckt. Tripped at 12.10 hrs. The 220 kV STPS- Chandil ckt. and 220 kV STPS-New Bishnupur ckt 1 & 2 were under breakdown condition prior to the incident. So the tripping resulted in isolation of STPS & CPL power station as well as Asansol and Purulia substation from the rest of the grid. As a consequence the running units of STPS (unit # 5) and CPL tripped.

Power was finally restored at STPS, Asansol and Purulia substation at 12.32 hrs through 220 kV Durgapur –Asansol ckt.

However, the house advised that in case of total power failure at any power station/sub-station, the operating personnel should strictly follow the stipulated norms of operational procedure.

- (c). On 21.05.11, 220 kV BkTPP-Gokarna ckt 1 & 2 tripped at around 15.46 hrs. Also, 132 kV Gokarna-Berhampur ckt 1 & 2 tripped at around 15.50 hrs causing no power at Berhampur sub-station. SLDC changed over the Berhampur sub-station to Amtala source but the 132 kV Amtala-Berhampur ckt 1 & 2 tripped at 16.09 hrs of 21.05.11 which could not be normalized. Hence, Berhampur sub-station remained under no power from 16.09 hrs of 21.05.11.**

It was revealed that 220 kV BkTPP-Gokarna ckt 1 tripped at 15.40 hrs and ckt 2 at 15.46 hrs on 21.05.11. Also, 132 kV Gokarna-Berhampur ckt 1 & 2 tripped at 15.50 hrs causing no power at Berhampur sub-station. The Berhampur load was shifted to Amtala source but the 132 kV Amtala-Berhampur ckt 1 & 2 tripped at around 16.10 hrs. The dead end tower of 220 kV Gokarna-BkTPP ckt 1 & 2 at Gokarna end collapsed and it fell on 132 kV Gokarna-Berhampur ckt 1 & 2 causing breakdown of those ckts. Also TL No.-70 i.r.o 132 kV Amtala-Berhampur ckt 1 & 2 collapsed due to which Berhampur remained without power from 15.50 hrs. At 21.34 hrs station auxiliary and emergency power at Berhampur was restored from 33 kV Debogram source. The power was finally restored at Berhampur at 02.14 hrs of 22.05.11 through Berhampur-Gokarna 132 kV double ckts.

ITEM No: 4. OPERATIONAL PLANNING.

(a) ANTICIPATED POWER SUPPLY POSITION FOR THE MONTH OF JUNE-11 & JULY-11.

Generation Forecast.

<u>Constituents</u>	<u>JUNE-2011</u>	<u>JULY-2011</u>
WBPDCL (S/O)	2520 MW	2260 MW
CESC(S/O)	1100 MW	1100 MW
DPL (S/O)	180 MW	180 MW

Demand forecast.

<u>Constituents</u>		<u>JUNE-2011</u>	<u>JULY-2011</u>
WBSEDCL		<i>4020 MW</i>	<i>4100 MW</i>
CESC	<i>SYSTEM DEMAND</i>	<i>1675 MW</i>	<i>1650 MW</i>
	<i>IMPORT (WBSEDCL+CPL+Other sources)</i>	<i>575 MW</i>	<i>550 MW</i>
DPL	<i>DEMAND</i>	<i>250 MW</i>	<i>250 MW</i>
	<i>IMPORT (WBSEDCL+Other sources)</i>	<i>70 MW</i>	<i>70 MW</i>

(b). FINALIZATION OF SHUT DOWN PROPOSAL FOR THE MONTH OF JUNE-11 & JULY-11 i.r.o GENERATING UNITS, TRANSMISSION LINES, OTHER EQUIPMENTS ETC AS PROVIDED BY CONSTITUENTS.

<u>Constituent</u>	<u>Element</u>	<u>Shutdown</u>		<u>Remarks</u>
		<u>From</u>	<u>To</u>	
GENERATING UNITS				
BkTPP	<i>Unit # 1</i>	<i>01.07.11</i>	<i>10.08.11</i>	<i>Annual overhauling.</i>
SgTPP	<i>Unit # 2</i>	<i>01.07.11</i>	<i>20.07.11</i>	<i>Short maintenance. (Subject to synchronization of KTPP unit # 1)</i>
TRANSMISSION LINES & EQUIPMENTS				
WBSETCL	<i>132 kV Arambag- Tarkeshwar ckt# 1 & 2.</i>	<i>June 2011</i>	<i>Shutdown required for around 10 days on continuous basis.</i>	<ul style="list-style-type: none"> • <i>Shutdown needed due to diversion programme of ckts. for construction of new railway tracks by railway authority.</i> • <i>The shutdown may be availed after Durga puja.</i>
	<i>400 kV Arambag- DGP ckts.</i>	<i>June 2011</i>	<i>Shutdown required for around 15 days on continuous basis.</i>	<ul style="list-style-type: none"> • <i>Shutdown needed due to diversion programme of ckts. for construction of new railway tracks by railway authority.</i> • <i>May be availed after Durga puja.</i>
	<i>For augmentation of transformer capacity at different substations such as Birsingha, Rampurhat , Egra, C.K.Road, Bolepur & Cooch-behar, shutdown will be required. The requisition for shutdown will be communicated to SLDC from time to time for necessary clearances.</i>			

(c). **Prolonged outage of power system elements in WBSETCL.**

<u>Network elements under outage</u>	<u>Tentative date of normalization.</u>
i). At Durgapur 400 kV sub-station, 315 MVA transformer-II, since 28/12/10.	The spares of BHEL are not yet received, and hence WBSETCL authority has taken up the matter with BHEL authorities.
(ii). At Durgapur 400 kV sub-station, 105 MVA spare transformers since 28/12/10.	May be charged by mid of JUNE 2011.
(iii). At DGP, Breaker of 400 kV Parulia ckt # 2, since long.	Dates could not be ascertained.
(iv). At Hind Motor, Breaker of Dankuni ccts since long.	May be normalized by 6 th or 7 th of JUNE.
(v). 220 KV Jeerat-Satgachia ckt 1 & 2 since long.	Dates could not be confirmed.
(vii). At Subhashgram, 160 MVA, 220/132 kV transformer-1 since long.	The spares were already received, but the work is not yet complete. WBSETCL representative assured that he will look into the matter regarding completion of the work as early as possible.

ITEM- 5 : ISSUES RAISED BY SLDC.

- (i) **Frequent revision of final schedules due to communication gap between ALDC and WBPDC power plant while giving effect of revisions. (e.g. 01/05/11 i.r.o BkTPP & KTPP, 21/05/11 & 23/05/11 i.r.o BkTPP).**

It was revealed that few incidences of disagreement were observed between WBPDC & ALDC (WBSEDCL) while preparing schedules, due to which frequent changes of Final schedule had to be done.

After detailed discussion the WBPDC and ALDC (WBSEDCL) decided to mutually sort out any discrepancy between them and the outcome will be informed to SLDC during preparations of Schedules.

- (ii) **WBPDC power plants are not declaring their availability properly particularly during synchronization of their units.**

SLDC informed that few power plants of WBPDC are not giving their availability properly for prolonged period after the synchronization of their units, due to which the additional available power could not be scheduled and thereby could not be properly utilized for the overall benefit of the state.

The house advised all WBPDC power plants to look into the matter.

- (iii). **All schedule revisions should be sent through fax by all constituents to SLDC. If the schedule is sent through e-mail then, intimation to be given through fax message to SLDC.**

Adl.C.E.,SLDC advised all constituents to send their schedule requisition both by FAX as well as by e-mails to avoid any miscommunication in future.

- (iv). **Current status of STPS unit # 6 and DPL unit # 7.**

Representative from DPL informed that the DPL unit # 7 may need another 1-2 months for recommissioning of the said unit.

Representative from STPS could not inform the status of unit # 6 of STPS.

ITEM No: 6. AGENDA NOTE PUT UP BY SLCF MEMBERS FOR DISCUSSION:

6.1. Agenda note put up by KTPP, WBPDC

- (i) **Frequent backing down of generation & withdrawals is affecting equipment health.**

Representatives from KTPP complained about frequent backdown of generation and withdrawals are affecting their equipments.

On this issue WBSEDCL informed the house that due to frequent nor' westers during the concerned period the system demand remained low and unpredictable and as such the generation had to be reduced for economical operation.

- (ii) **At present Resultant DC = AG, if $(AG/SG) < 95\%$ and $Freq < 50$ Hz. But during backing down the Resultant DC should be equal to $AG + (DC - SG)$ in the above mentioned situation.**

SLDC representative informed that the method of calculation of resultant DC has always been done as per Terms & condition of Tariff regulation of WBERC. From April-2011 onwards it is being done as per clause no. 6.7.8 of Terms & condition of Tariff regulation 2011, and hence no other formula other than the prescribed formula would be applicable in any case.

6.2. Agenda note put up by SgTPP, WBPDC

- (i). **Intimation of backing down schedule should be given well in advance, so that the backdown schedule can be followed.**

Matter already discussed and settled as per Item no. 5. (i) above.

- (ii). **It is impossible to follow backdown schedule for SgTPP due to improper ramp up/down (as found in some cases) while imposing/withdrawing back down of generation.**

Few examples of discrepancies in schedule were cited by SgTPP. After detailed observation it was seen that in those cases there were changes in the number of running units. Hence, the

schedules showed larger variations in those time blocks and the ramp up/ramp down rates were larger than the stipulated limits which are acceptable in such cases.

6.3. Agenda note put up by ALDC, WBSEDCL

- (i). **WBPDCCL power plants particularly KTPP is giving high D.C. during backing down condition, as it happened till 28.04.11. But later during the crisis period specially on 29.04.11 generating stations reduced their DC.**

Representatives from WBSEDCL informed the house that it was observed often that whenever there is an instance of backing down, power plants specially KTPP increases their availability and as soon as the backdown is withdrawn KTPP reduces their availability.

On this issue representative from KTPP conveyed the house that it was not intentional and it has happened due to the unpredictable quality of coal.

The house informed the WBSEDCL that being the sole beneficiary of WBPDCCL power plants, they are entitled to exercise capacity demonstration of any generating station at any point of time.

- (ii). **It was noted that in the last SLCF meeting the declared sent out forecast of WBPDCCL was 2700 MW(considering all planned outages). In real time the generation has come down to as low as 2305 MW.**

WBSEDCL representative requested the house to drop the issue.

ITEM 7: MISCELLANEOUS:

- (i). **Deduction of Energy Cost of SgTPP unit # 1, (Agenda by ALDC, WBSEDCL):**

ALDC, WBSEDCL conveyed the house that, on 21.05.2011 SgTPP considerably delayed in following the unit desynchronization instruction given by ALDC and on 23.05.11, SgTPP synchronized their unit # 1 much ahead of the intimated time. As in both the situation the grid frequency were on higher side, WBSEDCL desired for curtailment of Schedule charges i.r.o SGTPP unit # 1, as the over injected power was pushed to the grid at almost negligible rates.

On this issue representative from SgTPP and WBPDCCL corporate could not deliberate as they were not aware of the agenda well in advance.

- (ii). **Date and venue of next SLCF (i.e. 21th) Meeting.**

The house proposed that the next (21th) SLCF meeting may be held at KTPP, however the dates and other details will be declared later on.

Sd/-
(D.Chakraborty)
CHIEF ENGINEER,(SLDC)

No.SLDC/How/109 A(SLCF)/

Dated:

Copy to-

1. Sri A.C.Sarkar, Managing Director, WBSETCL, Vidyut Bhavan, Kolkata-91.
2. Sri.S.Nag,Director (Operation), WBSETCL, Vidyut Bhavan,Kolkata-91.
3. Sri.A.Guha, Director (R & T), WBSEDCL, Vidyut Bhavan, Kolkata-91.
4. Director (T&D), Durgapur Administrative Building, Durgapur Projects Ltd., Durgapur.
5. Executive Director (O & M Project), WBPDCCL , Salt Lake City, Kolkata-700 098.
6. Sri A. Nayak, Chief Engineer, CLD, DVC, Maithon. (Attention Sri. S. K. Pal, Sr. Manager).
7. Sri. M.S. Pal, C.E.(PTR) WBSEDCL, Vidyut Bhavan, Kolkata-91.
8. Sri V.Chakraborty, Vice-President (S.O.), CESC Ltd., Statesman House, Kolkata-1.
9. Sri. P. P. Biswas, Addl. Chief Engineer, ALDC, WBSEDCL.
10. Sri. S.K.Das, Addl.C.E, Transmission Headquarter, WBSETCL, Vidyut Bhavan,Kol-91.
11. Sri.R.Chakraborty, Sr.Manager (System Control),CESC Ltd, Statesman House, Kol- 01.
12. Sri Swapan Kumar Sarkar, G.S.(T&D, Load Management), DPSC Ltd.
13. Sri Sushmit Kumar Roy, DGM (Opn), ALDC, DPL.
14. Sri. Soumen Chatterjee, Sr. Manager, KTHPP, WBPDCCL.
15. Sri. Barun Ghosh, Sr. Manager, BKTHPP, WBPDCCL.
16. Sri A. K. Mondal , Sr.Manager, SGTHPP, WBPDCCL.
17. Sri. P. Sinha, Sr. Manager (E), STPS, WBPDCCL.
18. Sri. P.K. Pal, Sr. Manager,(System Operation –Electrical),BTPS, WBPDCCL.

(D.Chakraborty)
CHIEF ENGINEER,(SLDC)