EASTERN REGIONAL POWER COMMITTEE
14, GOLF CLUB ROAD, TOLLYGUNGE
KOLKATA-700 033

MINUTES OF THE MEETING ON LOAD - GENERATION BALANCE REPORT (LGBR) FOR THE YEAR 2017-2018 HELD ON 30.12.2016 (FRIDAY) AT 11:00 HRS AT ERPC, KOLKATA

List of participants in the meeting is enclosed at **Annexure – I.**

Member Secretary, ERPC welcomed the participants and thanked the constituents for providing necessary data for the preparation of the draft LGBR. No representation was there in the meeting from Jharkhand and Sikkim and their absence were seriously noted. Member Secretary, ERPC requested Shri P. K. De, EE, ERPC to initiate discussion as per agenda.

Shri P. K. De, EE thanked Member Secretary and corroborated that as per the IEGC under Clause 5.7.4 of Principal Regulations, first amendment in 2012 under sub-Regulation (a), (b), (c) and (d), "RPC Secretariat is primarily responsible for finalization of the Annual Load Generation Balance Report (LGBR) and the annual outage plan for the following financial year". In order to fulfill the objectives, this meeting is convened to discuss and finalize the LGBR and annual outage plan for both the generating units as well as transmission elements for the year 2017-18. ERPC Secretariat had requested all concerned utilities to furnish all relevant information pertaining to LGBR for scrutiny and prepare the draft report for discussion in the meeting. All the utilities have furnished the information except Sikkim. He then requested the members present to offer their views and suggestion on the draft LGBR 2017-18 prepared by ERPC Secretariat based on the information received from the concerned utilities and in line with the present trend.

ITEM NO. 1 DETAILS OF PROPOSED UNITWISE MAINTENANCE PROGRAMME OF THERMAL GENERATING STATIONS IN ER

WBSLDC representative opined that proposed shut down of Kolaghat unit#3 during July'17 to Feb'18 would not affect them very much, so it could be availed by WBPDCL during that period. However, they were not agreed to allow S/D of Bandel Unit#5 during Sep'17 and agreed with the proposal of ERPC Secretariat to defer the same to Dec'17. WBPDCL assured to check from their side and confirm the same subsequently. In the proposed maintenance schedule S/D of Bandel unit#5 has been shown in Dec'17.

House agreed with the proposal of ERPC Secretariat regarding change of S/D dates of FSTPS Unit#4. Maintenance of FSTPS unit#4 is deferred to October'17. It was also decided to defer the S/D of FSTPS unit#6 to the end of Nov'17 and could be availed only after return of unit #4. Date of proposed S/D of Barh unit#5 was not deferred but house requested NTPC to ensure return of the same positively by middle of Sep'17 on the scheduled date.

House also requested the concerned constituents to ensure the return of units availing S/D during Aug-Sep well before the Durga Puja.

No other change or modification suggested by the house, so the S/D proposal of the other thermal units of various constituents as mentioned in the agenda were agreed.

NTPC representatives informed the house that if exigencies arise during summer due to water shortage in the river Ganges as it was happened during 2016, they would try to avail the proposed S/D of the FSTPS units during that period so that the units remain available during rest of the period.

The schedule of the all thermal units maintenance programme as finalized based on discussion in the meeting and subsequent feedback from the utilities are tabulated in **Annexure-II**.

ITEM NO. 2 ABSTRACT OF SYSTEMWISE PEAK DEMAND (MW) Vs. AVAILABILITY (MW) AND OFF-PEAK DEMAND (MW) Vs. AVAILABILITY (MW) FOR 2017-2018

The month-wise projected Peak Demand (MW) figures have been received from most of the constituents except Sikkim State. On the basis of the information furnished by constituents the abstract statement of system wise peak and off-peak demand (MW) were prepared and placed for discussion. The same was reviewed in the meeting and modifications have been made accordingly wherever necessary based on inputs of the various utilities during deliberation.

BSPTCL: Representative from BSPHCL confirmed that the existing bilateral arrangement with M/s Adani and GMR will continue during 2017-18. MTPS (Kanti) U# 3&4 are likely to generate to its full capacity during 17-18. The month wise peak demand (unrestricted) during the year has been considered in between 3800 MW to 4000 MW. As generation availability from own source will be less, there would be significant peak shortage but off-peak shortage would be not so high.

JUSNL: No representative was present from JUSNL and no further communication was received by ERPC Secretariat. Hence, JUSNL demand figures are kept unchanged. The month wise peak demand (unrestricted) during the year has been considered in between 1220 MW to 1300 MW. As generation availability from own source will be less, there would also be considerable peak shortage but off-peak shortage would be not so high.

DVC: Peak availability from DVC's own source has been realistically projected to the range of around 4800 MW. Bilateral transaction of DVC would be around 1300 MW. The month wise peak demand during the year has been considered in between 2640 MW to 2800 MW. As generation availability from own source would be reasonably high, there would be sufficient peak as well as off-peak surplus even after bilateral transaction.

GRIDCO: Minor modification has been made on some months peak demand based on revised demand forecast furnished by OPTCL. The month wise peak demand during the year has been considered in between 4000 MW to 4400 MW. Due to less availability during the summer season, Odisha have arranged some power through banking to manage their peak load. Odisha would be able to manage its load in both peak and off-peak condition through suitable management of its hydro source but the same depends on good monsoon.

WBSEDCL: From the data provided by WBSLDC, it appeared that this time WBSEDCL would not import any surplus power of DPL as well as not supply any power to CESC. The month wise peak demand during the year has been considered in between 5315 MW to 6460 MW. As indicated by WBSLDC, to meet their full peak demand WBSEDCL have to depend on purchase of significant

amount of power through STOA in the summer months even after import from LTOA/MTOA, CPPs, IPPs etc. Export of power by West Bengal to Bangladesh has not been considered in the LGBR 17-18 as the agreement between the two is yet to be finalized. Representative from the utility assured that they would manage their system through import of additional power to meet the full system requirement from the open market and there would be no shortage. However, at this stage it would not be possible to confirm the exact source.

DPL: The month wise peak demand during the year has been considered in between 235 MW to 275 MW. As apprehended by DPL representative, there would be no growth in their system demand and even it might be reduced by some amount during the year. On availability of U#8 (250 MW), power position of DPL system has been improved and as planned, if the units remained on bar during 2017-18, they would have surplus of around 150 MW peak power barring the months when U#7 or U#8 would be on shutdown. As this year WBSEDCL may not import surplus power from DPL, they have to find the market for the surplus power which is yet to be tied up.

CESC: Power supply position would remain comfortable as usual during 2017-18 also. This year they would not avail any assistance from WBSEDCL. They would also regulate their generation from own source. As indicated and subsequently confirmed by CESC representative, they planned no generation from their Titagarh plant during 2017-18. Also from Nov'17 to Feb'18 there would be no generation programme from Southern Generating station. On enquiry CESC representative confirmed that they would operate their various plants on cost effective basis on merit order operation. Though there would be sufficient support from power station of Haldia Energy Ltd., CESC would not be self sufficient to meet its demand. As indicated, CESC might have to purchase to the tune of 780 MW power during peak hours of some summer months. CESC representative confirmed that they would purchase the same from the open market and assured that there would be no peak shortage.

Sikkim: No information/data was received from Sikkim. No representative from Sikkim was also present. Based on available information, demand and availability forecast have been worked out. However, it is confirmed that there would be peak as well as off-peak surplus throughout the year after considering its availability of share from the IPPs in the state.

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Region: There would be peak surplus throughout the year to the tune of 900 MW to 2300 MW and even after considering the backing down surplus during off peak hours to the tune of 300 MW to 2150 MW. These surplus figures are after fulfilling bilateral export commitment of DVC. This is mainly due to huge surplus in DVC system and import of power by WBSEDCL/WBSETCL as well as CESC from various sources apart from regional sources.

The summary statement of Peak demand Vs. Availability and Off-peak demand Vs. Availability (in MW) of each constituent along with the region are enclosed at **Annexure – III & Annexure-IV** respectively.

Moreover, there is also availability of power from the regional thermal IPP source namely JITPL, APNRL, GMR & MPL and hydro IPP namely Chuzachen & Zorthang. Another thermal IPP, Indbharat and one hydro IPP, Teesta Urja are also waiting to contribute to the system.

As far as regional availability of power is concerned, apart from system constraint and financial burden of the concerned utility there is no reason for shortfall in any individual utility system as well as regional system.

ITEM NO. 3 ABSTRACT OF SYSTEMWISE ENERGY REQUIREMENT (MU) vs. AVAILABILITY (MU) FOR 2017-2018

As of now, availability from various stations as projected by the utilities have been considered for preparing the provisional LGBR for 2017-18. After finalization of target generation for 2017-18 by MoP/CEA the LGBR for 2017-18 would be re-casted and final LGBR would be prepared. Till then, energy availability for the constituents is provisional.

Generally there would be energy shortage in BSPTCL and JUSNL system in all the months due to less availability from own source. Bihar has shown generation plan of 915 MU from its Barauni station. It is doubtful how the units will perform after returning from long shutdown. If Barauni TPS could not generate as per projection made by BSPTCL, shortage of Bihar might be increased.

Also there would be energy shortage round the year in Jharkhand and shortage would depend on availability from its Patratu TPS.

DVC would be always energy surplus system.

For Odisha, very little shortfall appeared in some non-monsoon (winter) months which could be managed by Odisha through proper management in their hydro generation and if required through thermal plants under OPGC (IB TPS) & NTPC (TTPS).

WBSEDCL would be surplus system as they have planned to import significant amount of power from various sources. Export of power to Bangladesh has also not been considered during the year.

CESC has planned their system uniquely so that there would be neither surplus nor any shortage.

DPL system would be surplus except marginal shortfall during Nov'17 & Dec'17 as their one big unit, one at a time, would be out for planned maintenance for 15 days in those months.

Sikkim system will be always energy surplus considering its availability of share from the IPPs in the state.

However, there is possible marginal regional energy shortage in the month of April'17, Feb'18 & March'18 only which could be managed through proper generation management of the utility system.

The summary statement of Energy Requirement Vs. Energy availability (in MU) of each constituent as well as of the region are enclosed at **Annexure –V**.

Generation plan of some of IPP during 2017-18 is produced below:

JITPL – 9776 MU, MPL – 7376 MU, APNRL – 4021 MU, Chuzachen – 495 MU

Month wise energy generation programme from the GMR has not been received. Jorthang, a new hydro IPP, whose generation as well as supply plan also not known. Another thermal IPP namely Indbharat and hydro IPP namely Teesta Urja will also likely to come whose generation as well as supply plan also not known.

Only a small portion of the above availability from the IPPs would be used in ER as per past trend and rest would be available for export to outside region or additional requisition from the deficit utilities of ER.

However, after finalization of Generation Target by MoP/CEA, availability will be re-casted accordingly and be a part of the final LGBR.

ITEM NO. 4 SCHEDULE OF COMMISSIONING OF NEW GENERATING UNITS IN THE CONSTITUENTS SYSTEM

During deliberation concerned utility indicated the schedule of commissioning / commercial declaration (COD) of the following new generating units which are likely to come during 2017-18:

Constituent/ State	Power station	Capacity	Expected month of commissioning/ COD
DVC, Jharkhand	BSTPS'A'	Unit #1 (500 MW)	Under trial operation. **Jan'17**
BSPHCL, Bihar	Muzaffarpur (KBUNL)	Unit#3&4 (195MW each)	Unit#3 – Jan'17 & Unit#4 thereafter. COD of both units by Mar'17
	Baruni Extn.	Unit#8&9 (250MW each)	No specific information
WBPDCL, West Bengal	Sagardighi TPS	4 (500 MW)	Before Mar'17
Ind Bharat, Odisha	Utkal TPP	U#1 & 2 (350 MW each)	No specific information
Joint venture of NTPC & Railways (BRBCL)	Nabi Nagar TPP	U#1 - 4 (250 MW each)	No specific information
Joint venture of NTPC & Bihar (NPGC)	New Nabi Nagar TPP	U#1 -3 (660 MW each) + 3 X 800 MW	No specific information
NTPC	Barh Stage-I	U#1 -3 (660 MW each)	Unit#1 – By end Jan'17
NTPC	Darlipalli STPS (Sundargarh)	2 X 800 MW	Feb'2018
India Power Corp. Ltd,	At Haldia	2 X 150 MW	No specific information

ITEM NO. 5 ANNUAL MAINTENANCE OF TRANSMISSION ELEMENTS

Annual maintenance programme of transmission elements as received from the constituents will be circulated along with the final LGBR for 2017-18.

ITEM NO. 6 ANY OTHER POINTS WITH THE PERMISSION OF THE CHAIR.

No further point was raised for discussion. ERPC also informed based on the deliberation in the meeting draft LGBR for 2017-18 of ER would be published along with ththat after finalization of Generation Target by CEA & MoP, availability will be re-casted accordingly and be a part of the final LGBR.

The meeting ended with vote of thanks to the chair.

Annexure – I

List of Participants in the Meeting on LGBR 2017-18 held on 30.12.2016 at ERPC

Sl. No.	Name	Designation	Organisation
1	A.K.Bandyopadhyaya	MS	ERPC
2	S.P.Datta	AGM	ERPC
3	P.K.De	EE	ERPC
4	P.P.Jena	AEE	ERPC
5	S.K.Chatterjee	Consultant	ERPC
6	P.Halder	DGM(Engg)	WBPDCL
7	N.Saha	SM(OS)	WBPDCL
8	D.Kar	CE	DVC
9	S.H.Khan	CE	DVC
10	B.Pan	CE	DVC
11	S. Nayak	AGM	NTPC/ER-2
12	S.K.Sharma	AGM	NTPC/ER-I
13	A.Sarkar	AGM	NTPC/KBUNL
14	M.Prasad	EE	DGPC
15	Teknath Adhikari	AE	THP - DGPC
16	Rabten	AE	DGPC/CHP
17	J.Dorji	SO	DGPC/KHP
18	Choton Dubjan	Foreman	DGPC
19	S.R.Salder	AGM	MPL
20	B.B.Bhoi	Dy. Mgr.	ERLDC
21	Neha Srivastava	AEE	BSPTCL
22	Prachi Gupta	AEE	BSPTCL
23	C.K.Haldar	ACE	WB - SLDC
24	D.Bhattacharya	SE(EI)	SLDC, WBSETCL
25	R.Biswas	SM	ALDC, DPL
26	A.Sengupta	DGM (SC)	CESC
27	Sujit Kr. Moharana	Manager (E)	GRIDCO
28	Umakanta Sahoo	GM (GO)	SLDC , Odisha
29	Bibhudutta Panda	AGM	SLDC , Odisha
30	Asish Jena	AGM (O&E)	GMR KEL

Annexure-II

Proposed Maintenance Schedule of Thermal Generating Units of ER during 2017-18
(as finalised in LGBR meeting)

System	Station	Unit	Size (MW)	Period		No. of Days	Reason
				From	To		
BSPTCL	MTPS (KBUNL)	2	110	15.07.17	15.08.17	32	Overhauling
	BTPS	6	105	01.04.17	31.05.17	61	Under S/D since 18.03.12 for R&M work **(Exp. by Mar'17, Gen. cons. from Jun'17)**
		7	105	15.07.17	31.07.17	17	**Under S/D since 22.08.06. Presently under trial run. Gen. cons. full year.**
JUSNL	PTPS	4	40				Under Maintenance since long
		6	90				Under Maintenance since long
		7	105				Under Maintenance since long
		9	110				No information received
		10	110				No information received
	TVNL, Tenughat	1	210	17.07.17	31.07.17	15	Annual Overhauling/Boiler Overhauling
		2	210	16.06.17	30.06.17	15	Annual Overhauling/Boiler Overhauling
DVC	MTPS	1	210	01.12.17	17.12.17	17	Burner Replacement
		3	210	25.08.17	14.09.17	21	AOH (Boiler)
		4	210	01.04.17	21.04.17	21	AOH (Boiler)
		5	210	05.03.18	25.03.18	21	AOH (Boiler)
		7	500	20.05.17	04.06.17	15	Burner Replacement
		8	500	24.12.17	08.01.18	16	Burner Replacement
	BTPS - B	3	210	01.11.17	21.11.17	21	AOH (Boiler)
	CTPS	2	130	01.04.17	21.04.17	21	Burner Replacement
		3	130	03.08.17	18.08.17	16	Burner Replacement
		8	250	17.01.18	26.02.18	41	COH
	KTPS	2	500	15.09.17	10.10.17	26	AOH (Blr, TG Brgs, LPT Gen)
	DSTPS	2	500	20.07.17	14.08.17	26	AOH (Blr, TG Brgs, LPT Gen)
ODISHA	TTPS	1	60	23.10.17	21.11.17	30	Capital Maintenance
		2	60	10.04.17	24.04.17	15	Boiler Overhaul
		3*	60	01.09.17	15.09.17	15	Boiler Overhaul
		4	60	26.06.17	10.07.17	15	Boiler Overhaul
		5	110	20.07.17	23.08.17	35	Boiler Overhaul + HPT + IPT
		6*	110	03.12.17	22.12.17	20	Boiler Overhaul
	IB TPS	1	210	05.06.17	25.06.17	21	Minor AOH
		2	210	01.08.17	04.09.17	35	COH
WBPDCL	KTPS	1	210	20.10.17	26.10.17	7	Boiler License
		2	210	02.01.18	21.01.18	20	Boiler Overhauling
		3	210	25.07.17	05.02.18	196	R&M
		4	210	27.01.18	15.02.18	20	BTG Overhauling
		5	210	17.12.17	23.12.17	7	Boiler License
		6	210	01.06.17	31.07.17	61	BTG+DCS+Stator Replacement+HPC Replacement
	Bakreswar TPS	1	210	22.10.17	26.11.17	36	BTG+TPR+(EHG+DAVR) Upgradation+GT OH
		4	210	09.07.17	29.07.17	21	Boiler Overhauling
		5	210	13.08.17	02.09.17	21	Boiler Overhauling
	Bandel TPS	2	60	01.11.17	28.02.18	120	Capital Overhauling & Departmental R&M
		3	60	01.03.17	30.06.17	122	Capital Overhauling & Departmental R&M
		4	60	01.07.17	31.10.17	123	Capital Overhauling & Departmental R&M
		5**	210	01.12.17	30.12.17	30	Boiler Overhauling
	Santaldih TPS	5	250	01.08.17	25.08.17	25	Boiler + LTP + Generator OH
		6	250	01.09.17	07.09.17	7	Boiler License
	Sagarighi TPS	1	300	01.11.17	06.11.17	6	Boiler License
		2	300	01.12.17	05.01.18	36	Capital Overhauling
CESC	BUDGE-BUDGE	1	250	19.12.17	08.01.18	21	Not Specified
		2	250	12.12.17	18.12.17	7	Not Specified
		3	250	18.11.17	24.11.17	7	Not Specified
	TITAGARH	1	60	05.12.17	08.12.17	4	Not Specified
		2	60	18.01.18	01.02.18	15	Not Specified
		3	60	13.12.17	03.01.18	22	Not Specified
		4	60	15.11.17	18.11.17	4	Not Specified
	SOUTHERN	1	67.5	21.11.17	05.12.17	15	Not Specified
		2	67.5	11.01.18	14.01.18	4	Not Specified
HEL	HALDIA	1	300	17.01.17	31.01.17	15	Not Specified
		2	300	No planned maintenance			
DPL	DPPS	6	110				Under Maintenance since long
		7	300	15.12.17	31.12.17	17	Boiler License Renewal
		8	250	01.11.17	15.11.17	15	Boiler License Renewal
NTPC	FSTPS	1	200	01.05.17	04.06.17	35	Boiler, Turbine, Gen., ESP R&M
		3	200	01.07.17	04.08.17	35	Boiler, ESP R&M
		4***	500	01.10.17	04.11.17	35	Boiler, Turbine, Gen.
		5	500	10.03.17	13.04.17	35	Boiler, Turbine, DDCMIS R&M
		6***	500	21.11.17	25.12.17	35	Boiler, Turbine
	KhSTPS	1	210	01.06.17	05.07.17	35	Boiler, Gen., DDCMIS R&M
		2	210	03.02.18	27.02.18	25	Boiler, DAVR
		4	210	01.11.17	05.12.17	35	Boiler, Turbine, Gen., DDCMIS R&M
		6	500	13.07.17	16.08.17	35	Boiler, Turbine, Gen.
	Barh	5	660	16.08.17	14.09.17	30	Boiler
	TSTPS	1	500	21.10.17	14.11.17	25	Boiler+LPT+Gen.+CT Cell R&M
		3	500	01.08.17	14.09.17	45	Boiler Mod.+Capital+Gen.+ESP R&M+Boiler RLA
		4	500	01.06.17	15.07.17	45	Boiler Mod.+LPT+Gen.+ESP R&M+Boiler RLA
IPP	GMR	1	350				No information Received
		2	350	01.11.17	25.11.17	25	Boiler Overhauling
		3	350				No information received
	JITPL	1	600				No information received
		2	600				No information received
	MPL	1	525	14.08.17	14.09.17	32	Not Specified
	APNRL	1	270	No planned maintenance			
		2	270				

Note: * OPTCL proposed to swap the dates of maintenance between Unit # 3 & 6 but NTPC did not agreed immediately and informed they will do the needful if situation permits as well as demand so. Subsiquently it would be finalised in OCC.

** WBSLDC not agreed for S/D of Bandel Unit#5 during Sep'17 as proposed and requested to shift it to Dec'17. WBPDCL assure to check from their side and confirme it latter. Bilaterally they will discuss & finalize and would be approved in OCC.

*** Though FSTPS Unit#4 was proposed for S/D during Aug-Sep'17 by NTPC, after discussion it was decided to shift the same to after Durga Puja and accordingly their Unit#6 would also be shifted to Nov-Dec'17 and only after return of Unit#4 with a gap of at least 7 days.

ANNEXURE - III

ABSTRACT OF STATEWISE/SYSTEMWISE/CONSTITUENTWISE PEAK DEMAND- vs- AVAILABILITY IN EASTERN REGION FOR THE PERIOD FROM APRIL-2017 TO MARCH-2018

(ALL FIGURES IN MW & NET)

SL.NO	PARTICULARS	Apr-17	May-17	Jun-17	Jul-17	Aug-17	Sep-17	Oct-17	Nov-17	Dec-17	Jan-18	Feb-18	Mar-18
1	BIHAR												
i)	NET MAX DEMAND	3800	3800	3900	3900	3900	3900	4000	3900	3800	3800	3900	4000
ii)	NET POWER AVAILABILITY- Own Source	322	322	425	341	393	435	425	425	405	405	403	405
	Central Sector+Bi-Lateral	2891	2938	3133	2893	2806	2835	2745	2663	2647	2693	2724	2860
iii)	SURPLUS(+)/DEFICIT(-)	-587	-540	-342	-666	-701	-629	-830	-812	-747	-702	-773	-734
2	JHARKHAND												
i)	NET MAX DEMAND	1220	1250	1280	1300	1280	1280	1300	1280	1250	1250	1250	1260
ii)	NET POWER AVAILABILITY- Own Source	360	360	289	415	489	489	460	420	410	400	390	390
	Central Sector+Bi-Lateral	598	630	729	635	613	617	587	566	501	508	551	592
iii)	SURPLUS(+)/DEFICIT(-)	-262	-260	-262	-250	-178	-174	-253	-294	-339	-342	-309	-278
3	DVC												
i)	NET MAX DEMAND (OWN)	2760	2760	2770	2780	2640	2720	2720	2750	2760	2770	2770	2800
ii)	NET POWER AVAILABILITY- OWN SOURCE	4806	4884	4952	4968	4851	4829	4981	4914	4783	4781	4898	4837
	- Central Sector+MPL	522	574	648	502	455	444	538	503	438	433	492	503
	BI-LATERAL EXPORT BY DVC	1300	1300	1300	1300	1300	1300	1300	1300	1300	1300	1300	1300
iii)	SURPLUS(+)/DEFICIT(-) AFTER EXPORT	1269	1398	1531	1390	1366	1253	1499	1367	1161	1143	1320	1240
4	ODISHA												
i)	NET MAX DEMAND	4400	4450	4400	4350	4350	4300	4200	4200	4000	4000	4000	4200
ii)	NET POWER AVAILABILITY- OWN+IPP+CPP	3207	3253	3151	3201	3521	3530	3154	3156	3117	2994	3022	3124
	- Central Sector	1201	1253	1293	1185	1161	1215	1104	1050	1037	1094	1110	1183
iii)	SURPLUS(+)/DEFICIT(-)	8	56	44	36	332	445	58	6	154	88	132	107
5	WEST BENGAL												
5.1	WBSEDCL												
i)	NET MAX DEMAND (OWN)	6280	5980	6000	6205	6160	6225	6035	5345	5315	5555	5820	6460
ii)	CESC's DRAWAL	0	0	0	0	0	0	0	0	0	0	0	0
iii)	TOTAL WBSEDCL's DEMAND (incl. Export)	6285	5985	6010	6215	6170	6235	6045	5355	5325	5560	5825	6465
iv)	NET POWER AVAILABILITY- Own Source	3466	3649	3716	3481	3311	3566	3564	3324	3663	3649	3779	3613
	- Import from DPL	0	0	0	0	0	0	0	0	0	0	0	0
	- Central Sector+Bi-lateral+IPP&CPP+TLDP	3149	2722	2780	2743	2919	2732	2492	2168	1739	2075	2357	3157
v)	SURPLUS(+)/DEFICIT(-) AFTER EXPORT	330	386	486	9	60	63	11	137	77	164	311	305
vi)	EXPORT (TO B'DESH & SIKKIM)	5	5	10	10	10	10	10	10	10	5	5	5
5.2	DPL												
i)	NET MAX DEMAND	270	275	265	265	260	255	260	250	235	235	245	260
ii)	NET POWER AVAILABILITY	426	426	426	426	426	426	426	329	298	426	426	426
iii)	SURPLUS(+)/DEFICIT(-)	156	151	161	161	166	171	166	79	63	191	181	166
5.3	CESC												
i)	NET MAX DEMAND	2020	2095	2100	1870	1895	1990	1950	1780	1590	1410	1610	1810
ii)	NET POWER AVAILABILITY - OWN SOURCE	750	750	750	750	750	750	750	670	670	670	670	730
	IMPORT FROM OTHER SOURCE (INCL. IPP/CPP -40 MW)	740	815	820	590	615	710	670	580	390	210	410	550
	IMPORT FROM HALDIA ENERGY LTD.	530	530	530	530	530	530	530	530	530	530	530	530
iii)	TOTAL AVAILABILITY	2020	2095	2100	1870	1895	1990	1950	1780	1590	1410	1610	1810
iv)	SURPLUS(+)/DEFICIT(-)	0	0	0	0	0	0	0	0	0	0	0	0
6	WEST BENGAL (WBSEDCL+DPL+CESC) (excluding DVC's supply to WBSEDCL's command area)												
i)	NET MAX DEMAND OWN (Excl. Export)	8570	8350	8365	8340	8315	8470	8245	7375	7140	7200	7675	8530
ii)	NET POWER AVAILABILITY- Own Source	4642	4825	4892	4657	4487	4742	4740	4323	4631	4745	4875	4769
iii)	CS SHARE+BILETARAL+IPP/CPP+TLDP+HEL	4419	4067	4130	3863	4064	3972	3692	3278	2659	2815	3297	4237
iv)	SURPLUS(+)/DEFICIT(-) BEFORE WBSEDCL'S EXP.	491	542	657	180	236	244	187	226	151	360	497	476
v)	SURPLUS(+)/DEFICIT(-) AFTER WBSEDCL'S EXP.	486	537	647	170	226	234	177	216	141	355	492	471
7	SIKKIM												
i)	NET MAX DEMAND	85	85	85	85	85	85	85	85	90	90	90	90
ii)	NET POWER AVAILABILITY- Own Source	5	5	10	10	10	10	10	3	3	3	3	5
	- Central Sector	127	148	169	153	154	152	130	115	82	81	96	122
iii)	SURPLUS(+)/DEFICIT(-)	47	68	95	78	79	78	56	33	-5	-6	9	37
8	EASTERN REGION At 1.03 AS DIVERSITY FACTOR												
i)	NET MAX DEMAND	20228	20092	20194	20150	19971	20150	19951	19019	18486	18553	19112	20272
ii)	BI-LATERAL EXPORT BY DVC	1300	1300	1300	1300	1300	1300	1300	1300	1300	1300	1300	1300
iii)	EXPORT BY WBSEDCL	5	5	10	10	10	10	10	10	10	5	5	5
iv)	NET TOTAL POWER AVAILABILITY OF ER (INCLUDING CS ALLOCATION +BILATERAL+CPP+HEL)	23101	23259	23822	22823	23004	23271	22567	21415	20714	20952	21861	23028
v)	PEAK SURPLUS(+)/DEFICIT(-) OF ER AFTER EXPORT (v = iv - i -ii - iii)	1568	1862	2318	1363	1724	1810	1306	1086	919	1093	1444	1451

ANNEXURE - IV

ABSTRACT OF STATEWISE/SYSTEMWISE/CONSTITUENTWISE OFF-PEAK DEMAND- vs- AVAILABILITY IN EASTERN REGION FOR THE PERIOD FROM APRIL-2017 TO MARCH-2018

(ALL FIGURES IN MW & NET)

SL.NO	P A R T I C U L A R S	Apr-17	May-17	Jun-17	Jul-17	Aug-17	Sep-17	Oct-17	Nov-17	Dec-17	Jan-18	Feb-17	Mar-18
1	BIHAR												
	i) NET MIN DEMAND	2600	2600	2650	2650	2650	2700	2700	2700	2700	2700	2750	2750
	ii) NET POWER AVAILABILITY- Own Source	322	322	405	331	383	425	405	405	405	405	403	405
	Central Sector+Bi-Lateral	1950	1935	1963	2310	2153	2080	1927	1769	1942	1947	1888	1959
	iii) SURPLUS(+)/DEFICIT(-)	-328	-343	-282	-9	-113	-195	-368	-526	-353	-348	-459	-386
2	JHARKHAND												
	i) NET MIN DEMAND	900	925	925	925	925	925	950	950	950	950	950	950
	ii) NET POWER AVAILABILITY- Own Source	360	360	289	346	420	420	420	360	360	360	360	360
	Central Sector+Bi-Lateral	391	395	425	581	539	497	401	364	388	386	384	394
	iii) SURPLUS(+)/DEFICIT(-)	-149	-170	-211	3	34	-8	-129	-226	-202	-204	-206	-196
3	DVC												
	i) NET MIN DEMAND (OWN)	2185	2150	2190	2200	2090	2150	2155	2180	2190	2195	2120	2215
	ii) NET POWER AVAILABILITY- Own Source	3343	3417	3432	3435	3368	3338	3424	3391	3341	3338	3422	3379
	- Central Sector+MPL	398	421	436	511	463	426	413	386	400	383	402	390
	BI-LATERAL EXPORT BY DVC	1300	1300	1300	1300	1300	1300	1300	1300	1300	1300	1300	1300
	iii) SURPLUS(+)/DEFICIT(-)	256	388	377	446	441	314	382	297	251	226	404	254
4	ODISHA												
	i) NET MIN DEMAND	3300	3350	3300	3250	3250	3250	3150	3100	2950	2900	2900	3100
	ii) NET POWER AVAILABILITY- Own Source+CPP	2406	2522	2485	2505	2892	2776	2809	2603	2482	2416	2426	2398
	- Central Sector	899	898	865	1022	965	998	857	771	891	894	873	903
	iii) SURPLUS(+)/DEFICIT(-)	5	70	50	277	606	524	516	274	423	410	399	201
5	WEST BENGAL												
5.1	WBSEDCL												
	i) NET MIN DEMAND (OWN)	4640	4200	4280	4125	4055	4035	3710	3100	3085	3225	3610	4495
	ii) CESC's DRAWAL	0	0	0	0	0	0	0	0	0	0	0	0
	iii) TOTAL WBSEDCL's DEMAND (INCL. EXPORT)	4645	4205	4290	4135	4065	4045	3720	3110	3095	3230	3615	4500
	iv) NET POWER AVAILABILITY- OWN SOURCE	2787	2747	2812	2581	2411	2664	2659	2647	2761	2748	2872	2708
	- Import from DPL	0	0	0	0	0	0	0	0	0	0	0	0
	- Central Sector+Bi-lateral+IPP&CPP+TLDP	1865	1611	1826	2275	2254	2081	1617	1427	1435	1425	1501	1805
	v) SURPLUS(+)/DEFICIT(-) AFTER EXPORT	7	153	348	721	600	700	556	964	1101	943	758	13
	vi) EXPORT TO BANGLADESH & SIKKIM	5	5	10	10	10	10	10	10	10	5	5	5
5.2	DPL												
	i) NET MIN DEMAND	260	260	255	245	230	245	250	240	240	240	250	270
	ii) NET POWER AVAILABILITY	308	308	308	308	308	308	308	238	254	362	362	308
	iii) SURPLUS(+)/DEFICIT(-)	48	48	53	62	78	62	58	-2	14	123	112	37
5.3	CESC												
	i) NET MIN DEMAND	1400	1465	1400	1360	1265	1400	1340	960	740	705	805	1340
	ii) NET POWER AVAILABILITY - OWN SOURCE	675	675	675	675	675	675	675	603	603	603	603	657
	FROM/TO OTHER SOURCE EXP/IMP	301	366	301	261	166	301	241	-67	-287	-322	-222	259
	FROM HALDIA ENERGY LTD.	424	424	424	424	424	424	424	424	424	424	424	424
	iii) TOTAL AVAILABILITY	1400	1465	1400	1360	1265	1400	1340	960	740	705	805	1340
	iv) SURPLUS(+)/DEFICIT(-)	0	0	0	0	0	0	0	0	0	0	0	0
6	WEST BENGAL (WBSEDCL+DPL+CESC) (excluding DVC's supply to WBSEDCL's command area)												
	i) NET MIN DEMAND	6300	5925	5935	5730	5550	5680	5300	4300	4065	4170	4665	6105
	ii) NET POWER AVAILABILITY- Own Source	3770	3730	3795	3564	3394	3647	3642	3488	3618	3713	3837	3673
	CENTRAL SECTOR SHARE+BILETARAL+IPP/CPP+TLDP+HEL	2590	2401	2551	2960	2844	2806	2282	1784	1572	1527	1703	2488
	iii) SURPLUS(+)/DEFICIT(-) BEFORE WBSEDCL'S EXP.	60	206	411	794	688	772	624	972	1125	1070	876	55
	SURPLUS(+)/DEFICIT(-) AFTER WBSEDCL'S EXP.	55	201	401	784	678	762	614	962	1115	1065	871	50
7	SIKKIM												
	i) NET MIN DEMAND	50	50	50	50	50	50	50	50	55	55	55	55
	ii) NET POWER AVAILABILITY- Own Source	0	0	0	0	0	0	0	0	0	0	0	0
	- Central Sector	71	77	80	138	135	132	77	66	64	64	63	70
	iii) SURPLUS(+)/DEFICIT(-)	21	27	30	88	85	82	27	16	9	9	8	15
8	EASTERN REGION At 1.03 AS DIVERSITY FACTOR												
	i) NET MIN DEMAND	14888	14563	14612	14374	14092	14326	13888	12893	12534	12592	13048	14733
	ii) BILATERAL EXPORT BY DVC	1300	1300	1300	1300	1300	1300	1300	1300	1300	1300	1300	1300
	iii) EXPORT BY WBSEDCL	5	5	10	10	10	10	10	10	10	5	5	5
	iv) NET TOTAL POWER AVAILABILITY OF ER (INCLUDING C/S ALLOCATION +BILATERAL+CPP)	16501	16477	16725	17704	17556	17545	16657	15387	15463	15433	15761	16419
	v) OFF-PEAK SURPLUS(+)/DEFICIT(-) OF ER AFTER EXPORT (v = iv- i - ii - iii)	308	609	803	2020	2154	1909	1459	1184	1619	1536	1407	380

ANNEXURE - V

ABSTRACT OF STATEWISE/SYSTEMWISE/CONSTITUENTWISE ENERGY REQUIREMENT- vs- AVAILABILITY IN EASTERN REGION FOR THE PERIOD FROM APRIL-2017 TO MARCH-2018

(ALL FIGURES IN MU & NET)

SL.NO	PARTICULARS	Apr-17	May-17	Jun-17	Jul-17	Aug-17	Sep-17	Oct-17	Nov-17	Dec-17	Jan-18	Feb-18	Mar-18	TOTAL 2017-18
1	BIHAR													
i)	NET ENERGY REQUIREMENT	2150	2200	2250	2250	2250	2250	2300	2250	2200	2200	2000	2300	26600
ii)	NET ENERGY AVAILABILITY- Own Source	178	166	181	195	204	200	242	234	242	242	220	242	2544
iii)	Central Sector+Bi-Lateral	1540	1656	1698	1808	1702	1673	1708	1441	1576	1566	1386	1583	19336
iv)	SURPLUS(+)/DEFICIT(-)	-432	-379	-371	-247	-344	-377	-351	-576	-382	-392	-395	-475	-4720
2	JHARKHAND													
i)	NET ENERGY REQUIREMENT	800	810	815	790	770	760	800	780	800	800	750	810	9485
ii)	NET ENERGY AVAILABILITY- Own Source	225	230	190	178	245	260	249	244	226	225	208	233	2714
iii)	Central Sector+Bi-Lateral	301	342	363	384	354	347	354	289	300	296	267	310	3907
iv)	SURPLUS(+)/DEFICIT(-)	-273	-238	-261	-229	-171	-153	-197	-247	-274	-279	-275	-267	-2865
3	DVC													
i)	NET ENERGY REQUIREMENT (OWN)	1656	1681	1658	1726	1634	1631	1687	1652	1712	1717	1553	1734	20041
ii)	NET ENERGY AVAILABILITY- OWN SOURCE	2622	2682	2657	2700	2690	2627	2766	2668	2698	2666	2407	2716	31898
iii)	Central Sector+MPL	317	369	391	375	339	320	377	313	316	298	283	309	4008
iv)	Bi- lateral export by DVC	936	967	936	967	967	936	967	936	967	967	874	967	11387
v)	SURPLUS(+)/DEFICIT(-) AFTER EXPORT	347	402	454	382	429	381	489	393	335	280	263	324	4478
4	ODISHA													
i)	NET ENERGY REQUIREMENT	2520	2641	2520	2567	2567	2484	2492	2412	2418	2418	2184	2492	29715
ii)	NET ENERGY AVAILABILITY- OWN+IPP+CPP	1845	1931	1790	1980	2009	2146	2024	1730	1632	1685	1573	1753	22098
iii)	Central Sector	695	753	732	781	756	760	730	611	695	693	617	714	8537
iv)	SURPLUS(+)/DEFICIT(-)	20	43	2	194	198	422	262	-71	-91	-40	6	-25	920
5	WEST BENGAL													
5.1	WBSEDCL													
i)	WBSEDCL'S OWN REQUIREMENT	3691	3557	3396	3580	3535	3423	3259	2599	2649	2912	2827	3573	39001
ii)	SUPPLY TO CESC	0	0	0	0	0	0	0	0	0	0	0	0	0
iii)	TOTAL ENERGY REQUIREMENT	3695	3561	3403	3587	3542	3430	3266	2606	2656	2916	2830	3577	39069
iv)	NET ENERGY AVAILABILITY- OWN SOURCE	2189	2238	2183	2097	1964	2077	2164	2056	2229	2198	2070	2195	25659
v)	Contribution from DPL	0	0	0	0	0	0	0	0	0	0	0	0	0
vi)	Central Sector+Bi-lateral+IPP&CPP+TLDP	1527	1420	1553	1670	1676	1585	1451	1095	1135	1121	1042	1444	16719
vii)	SURPLUS(+)/DEFICIT(-) AFTER EXPORT	21	98	333	180	98	232	349	544	707	403	282	62	3308
viii)	EXPORT (TO B'DESH & SIKKIM)	4	4	7	7	7	7	7	7	7	4	3	4	68
5.2	DPL													
i)	NET ENERGY REQUIREMENT	195	194	184	184	171	178	187	174	181	179	170	195	2192
ii)	NET ENERGY AVAILABILITY	198	194	187	193	193	187	199	158	168	181	172	198	2228
iii)	SURPLUS(+)/DEFICIT(-)	3	0	3	9	22	9	12	-16	-13	2	2	3	36
5.3	CESC													
i)	NET ENERGY REQUIREMENT	1103	1092	1089	1016	1040	1027	984	802	733	690	705	958	11239
ii)	NET ENERGY AVAILABILITY - Own Source	540	558	542	545	546	524	536	431	365	408	411	525	5931
iii)	FROM OTHER SOURCE (INCL. IPP/CPP-29-30 MU/M)	201	176	192	124	145	152	108	83	76	69	48	112	1486
iv)	FROM HEL	362	358	355	347	349	351	340	288	292	213	246	321	3822
v)	TOTAL AVAILABILITY OF CESC	1103	1092	1089	1016	1040	1027	984	802	733	690	705	958	11239
vi)	SURPLUS(+)/DEFICIT(-)	0	0	0	0	0	0	0	0	0	0	0	0	0
6	WEST BENGAL (WBSEDCL+DPL+CESC) (excluding DVC's supply to WBSEDCL's command area)													
i)	NET ENERGY REQUIREMENT	4989	4843	4669	4780	4746	4628	4430	3575	3563	3781	3702	4726	52432
ii)	NET POWER AVAILABILITY- Own Source	2927	2990	2912	2835	2703	2788	2898	2645	2761	2787	2653	2918	33818
iii)	CS SHARE+BILATERAL+IPP/CPP+TLDP+HEL	2090	1954	2100	2141	2170	2088	1899	1466	1503	1403	1336	1877	22027
iv)	SURPLUS(+)/DEFICIT(-) BEFORE WBSEDCL'S EXP	28	101	343	196	127	248	367	536	701	409	287	69	3412
v)	SURPLUS(+)/DEFICIT(-) AFTER WBSEDCL'S EXP.	24	97	336	189	120	241	360	529	694	405	284	65	3344
7	SIKKIM													
i)	NET ENERGY REQUIREMENT	34	35	32	34	33	34	35	37	38	38	35	38	423
ii)	NET POWER AVAILABILITY- Own Source	3	3	7	7	7	7	7	2	2	2	2	3	52
	- Central Sector	69	88	96	103	101	97	89	66	51	50	48	65	923
iii)	SURPLUS(+)/DEFICIT(-)	38	57	70	75	75	70	61	31	15	14	15	29	552
8	EASTERN REGION													
i)	NET ENERGY REQUIREMENTOF ER	12149	12210	11944	12147	12000	11787	11744	10706	10731	10954	10224	12100	138696
ii)	BILATERAL EXPORT BY DVC	936	967	936	967	967	936	967	936	967	967	874	967	11387
iii)	EXPORT BY WBSEDCL	4	4	7	7	7	7	7	7	7	4	3	4	68
iv)	NET TOTAL ENERGY AVAILABILITY OF ER (INCLUDING CS ALLOCATION +BILATERAL+IPP/CPP+HEL)	12813	13164	13117	13486	13280	13314	13343	11708	12001	11913	11000	12723	151862
v)	ENERGY SURPLUS(+)/DEFICIT(-) OF ER AFTER EXPORT (v = iv - i -ii - iii)	-276	-17	230	365	307	584	625	59	296	-12	-101	-348	1710