

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

**AGENDA OF THE MEETING ON LOAD - GENERATION BALANCE REPORT (LGBR)
FOR THE YEAR 2018-2019 TO BE HELD ON 20.12.2016 (WENESDAY) AT 11:00 HRS AT
ERPC, KOLKATA**

**ITEM NO. I DETAILS OF PROPOSED UNIT MAINTENANCE PROGRAMME OF
THERMAL GENERATING STATIONS IN ER**

Except WBPDCCL & JITPL other constituents submitted unit-wise maintenance programme of their respective thermal generating stations for the year 2018-19. Those who have not submitted their detail maintenance programme are requested to submit the same for finalization. The schedule of the maintenance programme as submitted by the constituents has been tabulated in **Annexure-I**.

As summer arrives from April onwards, on analysis of the proposed schedule of maintenance programme, ERPC suggests a minor revision/shifting the schedule of Farakka unit#4 & 5. S/D of both the units are to be preponed to March'18 & March'19 respectively though in March, Board exams would be there. Keeping all the factors under consideration most suitable dates are to be fixed. The same S/D could be deferred to October (20.10.18) just after the Durga Puja. KhSTPP Unit#2 also might be deferred from April'18 to July'18.

Bihar & Jharkhand being the peak deficit state round the year, shifting of Central Sector units shut down will not affect further in general.

Exigencies that arose during previous summer due to generation loss from FSTPS for water shortage may please be kept under consideration and necessary arrangement may be kept ready to address such recurrence.

Member may discuss and finalize the shutdown program of the thermal units of different utilities.

**ITEM NO. 2 ABSTRACT OF SYSTEMWISE PEAK DEMAND (MW) Vs.
AVAILABILITY (MW) AND OFF-PEAK DEMAND (MW) Vs. AVAILABILITY (MW) FOR
2018-2019**

The month-wise projected Peak Demand (MW) has been received from all the constituents except Sikkim. In absence of relevant data, the projected off-peak demand of some constituents has been calculated on the basis of present load factor of the concerned constituents and availability (MW) is considered as per the trend of past data available at ERPC.

On the basis of the information furnished by the constituents and data available with ERPC (for some utilities), the abstract statement of system wise peak & off peak demand against availability (MW) has been prepared and placed for discussion in the draft LGBR (**refer Annexure-II & III respectively**).

Bihar

The proposed unrestricted peak demand by Bihar (4200 – 4700 MW) appears to be little high, hence based on the past trend after allowing growth month wise maximum demand has been considered

around 4100 – 4500 MW. Bihar will face peak shortage in every month and maximum to the tune of 1050 MW during Sep., Oct & Nov. and also maximum off peak shortage to the tune of 1000 MW during Dec. & Jan. This shortage is mainly due to low availability from own source. Practically, there is no generation from Barauni. If new units of Kanti (Mazaffarpur) able to perform significantly good then it is fine otherwise Bihar's peak power availability will suffer very adversely. Bihar's Barauni units are shutdown since long back (U# 6 from 2012 & U#7 from 2006). Bihar optimistically informed that Barauni unit # 6 & 7 would be available during 18-19 but appears to be not feasible hence not considered. Bilateral drawal from JITPL and GMR to the tune of 300 MW and 260 MW respectively considered as proposed by Bihar. From BRBCL around 50 MW (10%) and 67.5% power of Kanti Stage 2 also considered. Bihar may kindly appraise other source wise availability of additional power through LTOA, MTOA and STOA also, if any.

Bihar may kindly confirm the exact plan of Barauni Unit#8 though informed expected from March' 18.

Jharkhand

Jharkhand will also pass through under peak shortage as well as off-peak throughout the year and maximum to the tune of 300 MW. Patratu station has been shown as discontinued by Jharkhand. Own source is only Tenughat station. Bilateral drawal from APNRL to the tune of 75 MU per month i.e, around 105 MW considered. Jharkhand may kindly appraise source wise availability of additional power through LTOA, MTOA and STOA also, if any. Some power from Indian Power Limited has been shown by Jharkhand. Jharkhand may kindly confirm whether the Indian Power Ltd. itself is catering said load of some area.

Odisha

There might be no peak and off-peak shortage in Odisha system. Though there is very small shortage in few months that might be managed by Odisha through optimization of their hydro resources. There might be some surplus during off peak, particularly during the monsoon months. However being dominated by hydro stations everything will depend upon rainfall throughout the year. Their own thermal availability from TTPS & IB TPS are stable as well as highly performed.

Odisha has considered availability of power from Indbarath (IPP), Darlipalli and OPGC Stage-II. Odisha may kindly confirm their actual synchronization programme etc. and also intimate if not materialized, from which source the same power would be met.

DVC

DVC has shown discontinuation of their old plants namely Bokaro B (U#1,2&3), CTPS (U#1,2&3) and DTPS (U#3&4) during 2018-19. For DVC, peak as well as off peak is not at all a problem. After considering bilateral export to the tune of 1550 MW round the clock there would be sufficient surplus throughout the year.

CESC

CESC has planned their load generation balance in such a way that there will be no shortage or surplus for both the peak as well as off peak. Though they have to import a large quantity of power particularly during peak hours to meet their demand but no source has been indicated. CESC has considered no generation from their Titagarh station throughout the year and for Southern from November' 18 to February' 19.

DPL

DPL will also be able to meet their peak and off peak demand from its own generation. There will be surplus power mostly throughout the year if their units run steadily. DPL have considered their old unit

#6 almost throughout the year but availability of which is very much doubtful. If unit #6 remains available then it is fine otherwise during the period of shut down of unit#7 or 8 there might be marginal shortage.

Also as indicated by West Bengal SLDC, they would not draw any power from DPL, so DPL have to find the buyer for their surplus power or they have to reduce their generation according to their own demand.

West Bengal

As per WBSEDCL's projection there will be no shortage for both the peak as well as off peak. Both the shortfall or surplus could be managed through optimization of their own (WBPDCCL) generation or regulating quantity of purchase of power through STOA.. WB SLDC has shown significant amount of power import from LTOA, MTOA, outside state IPP, NVVNL Bundled power and some months through STOA to the tune of 1500 MW (March'19).

Import from TLDP has also shown high. Renewal of PPA with NHPC may please be confirmed.

No supply of power to CESC from WBSEDCL is considered during the year. No import of power from DPL by WBSEDCL is also considered this year.

Export to Bangladesh during the year is also not considered by WBSETCL/WBSEDCL.

WBSEDCL/WBSETCL may please explain.

Sikkim

Sikkim as usual this year also not furnished any data for their system. However, they will be not only able to meet their full requirement from the central sector share of power but also be a surplus system.

From the regional perspective, there will be peak as well as off-peak surplus throughout the year. These surplus figures are after fulfilling bilateral export commitment of DVC and considering regional diversity factor as 1.03. This is mainly due to huge surplus in DVC system and import of power by WBSEDC/WBSETCL as well as CESC from various sources apart from regional sources.

Moreover, there is also availability from the regional thermal IPP source namely Jindal (JITPL), Adhunik (APNRL), GMR & MPL and hydro IPP namely Chuzachen, Zorthang, Dikchu and Teesta-III. Another thermal IPP namely Indbharat 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.

The data taken into consideration for preparation of LGBR requires further discussion for its finalization. Members may please discuss and confirmed after deliberation.

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

The data of Energy Requirement (MU) for the year 2018-19 have been received from all constituents except Sikkim. For Sikkim, the energy requirement (MU) has been considered based on assumption only.

The data as received from the constituents have been compiled and shown in draft LGBR (**Refer Annexure-IV**).

For Bihar System there will energy shortage throughout the year. Bihar has shown generation plan of 2306 MU from its Barauni station including new unit (U#8). It is doubtful that all the units will be in bar and if at all available, how the units will perform after returning from long shutdown. Generation from Barauni has not been considered. However, if Barauni could generate as per projection made by BSPTCL, shortage of Bihar would be decreased.

For Jharkhand also there will be energy shortage round the year.

There would be surplus throughout the year in DVC system.

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

WBSIEDCL will be more or less managed during the year as they will import significant amount of power from various sources. Export of power to Bangladesh has not been indicated.

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

DPL system will be surplus though the year.

Sikkim system will be always energy surplus.

However, there is possible marginal regional energy shortage in few months but could be easily managed as there would be sufficient power available from the regional IPPs, both thermal & hydro.

Month wise energy generation programme from the thermal IPP namely JITPL & Adhunik have not been received. Generation as well as supply plan also not known for hydro IPP namely Chuzachen, Zorthang, Dikchu and Teesta-III. Another thermal IPP namely Indbharat will also likely to come whose generation as well as supply plan also not known.

IPPs are requested to clearly indicate their proposed supply plan to the respective States/beneficiaries of ER during 2018-19. Concerned States/beneficiaries are also requested to confirm the same.

Generation plan of some of IPP during 2018-19 is produced below:

GMR- 7585 MU (all three units), MPL – 7819 MU, APNRL – 4021 MU, Teesta-III – 5012 MU

Apart from the above, generation would be available from JITPL, Indbharat and Chuzachen, Zorthang, Dikchu.

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 CEA & MoP, availability will be re-casted accordingly and be a part of the final LGBR.

Members may please discuss.

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

Respective utilities may please confirm the schedule of commissioning of the following new generating units / any other units likely to come during 2018-19:

Constituent/ State	Power station	Capacity	As reported Expected month of Synchronization
BSPHCL	Baruni Extn.	Unit#8&9 (250MW each)	As indicated by Bihar: U#8 – Mar’18
Ind Bharat, Odisha	IBE(U)L	U#1 & 2 (350 MW each)	As indicated by IBE(U)L: U#1 – Apr’18 U#2 – Oct’18
Joint venture of NTPC & Railways (BRBCL)	Nabi Nagar TPP	U# 3 & 4 (250 MW each)	
Joint venture of NTPC & Bihar	New Nabi Nagar TPP	U# 1 - 3 (660 MW each)	
NTPC	Barh Stage-I	U# 1 - 3 (660 MW each)	
OPGC	IB Stage-II	U# 3 & 4 (660 MW each)	As indicated by OPGC: U#3 - Sep’18 U#4 - Nov’18
NTPC	Darlipalli		No info.

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 2018-19. However, any constituent having its plan for maintenance of transmission element but yet to submit the same are requested to furnish the same at the earliest for inclusion in the final LGBR 18-19.

Members may please discuss.

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

Proposed Maintenance Schedule of Thermal Generating Units of ER during 2018-19

System	Station	Unit	Size (MW)	Period		No. of Days	Reason
				From	To		
Bihar	MTPS (KBUNL)	1	110	15.07.18	05.08.18	22	Overhauling Maintenance
		3	195	15.11.18	14.12.18	30	Overhauling Maintenance
	BTPS	6	105	01.04.18	31.03.19	365	Under S/D since 18.03.12 for R&M work (Exp. by Mar'19)
		7	105	01.04.18	31.03.19	365	Under S/D since 22.08.06.
Jharkhand	TVNL, Tenughat	1	210	05.07.18	30.07.18	26	Overhauling
		2	210	02.08.18	27.08.18	26	Overhauling
DVC	MTPS	2	210	16.09.18	16.10.18	31	AOH (Boiler acid cleaning + LPT)
		3	210	12.06.18	12.07.18	31	AOH (Boiler acid cleaning + LPT)
		6	250	08.02.19	15.03.19	36	COH
	CTPS	7	250	10.09.18	30.09.18	21	BOH
		2	500	25.06.18	30.07.18	36	COH
	DSTPS	2	500	10.08.18	04.09.18	26	AOH (Bir, LPT Gen)
ODISHA	TTPS	1	60	01.12.18	30.12.18	30	Capital Maintenance
		2	60	24.04.18	08.05.18	15	Boiler Overhaul
		3	60	26.06.18	25.07.18	30	Capital Maintenance
		4	60	16.09.18	29.09.18	14	Boiler Overhaul
		6	110	01.08.18	20.08.18	20	Boiler Overhaul
		2	210	01.12.18	21.12.18	21	Minor AOH
WBPDC	KTPS	1	210				
		2	210				
		3	210				
		4	210				
		5	210				
		6	210				
	Bakreswar TPS	1	210				
		2	210				
		3	210				
		4	210				
		5	210				
	Bandel TPS	1	60				
		2	60				
		3	60				
		4	60				
		5	210				
	Santalidih TPS	5	250				
		6	250				
	Sagarighi TPS	1	300				
		2	300				
CESC	BUDGE-BUDGE	1	250	02.12.18	16.12.18	15	Not Specified
		2	250	19.12.18	23.12.18	5	Not Specified
		3	250	12.11.18	29.11.18	18	Not Specified
	TITAGARH	1	60	04.01.19	18.01.19	15	Not Specified
		2	60	24.02.19	27.02.19	4	Not Specified
		3	60	14.12.18	17.12.18	5	Not Specified
		4	60	29.12.18	12.01.19	15	Not Specified
	SOUTHERN	1	67.5	01.01.19	04.01.19	4	Not Specified
		2	67.5	05.01.19	19.01.19	15	Not Specified
	HEL	HALDIA	1	300			
2			300	17.01.19	31.01.19	15	Not Specified
DPL	DPPS	6	110	01.04.18	15.05.18	45	Boiler License & ESP Augmentation
		7	300	15.12.18	13.01.19	30	BTG OH
		8	250	17.07.18	15.08.18	30	BTG OH
NTPC	FSTPP	2	200	10.07.18	03.08.18	25	Boiler, LPT
		4	500	11.03.18	14.04.18	35	Boiler, TG, ESP
		5	500	22.03.19	15.04.19	25	Boiler, Gen., DDCMIS R&M
		6	500	10.08.18	13.09.18	35	Boiler, TG, ESP
	KhSTPP	2	210	05.04.18	29.04.18	25	Boiler, DAVR
		3	210	15.05.18	08.06.18	25	Boiler, Gen.
		4	210	24.06.18	30.06.18	7	S/D of Boiler
		5	500	01.08.18	04.09.18	35	Boiler, TG
		7	500	16.11.18	10.12.18	25	Boiler
	Barh	4	660	12.12.18	15.01.19	35	Boiler Modification
	TSTPS	2	500	10.11.18	09.12.18	30	Boiler+LPT
		5	500	05.04.18	19.05.18	45	Boiler Mod.+Capital+Gen.
6		500	20.08.18	13.09.18	25	Boiler+LPT+Boiler & Turbine RLA	
IPP	GMR	1	350	01.07.18	24.07.18	24	Annual Boiler Overhauling
		2	350				No planned maintenance
		3	350	01.09.18	24.09.18	24	Annual Boiler Overhauling
	JITPL	1	600				
		2	600				
	MPL	1	525	15.08.17	15.09.17	32	AOH
	APNRL	1	270	13.10.18	06.11.18	25	Not Specified
		2	270	17.01.19	10.02.19	25	Not Specified

**ABSTRACT OF STATEWISE/SYSTEMWISE/CONSTITUENTWISE PEAK DEMAND- vs- AVAILABILITY
IN EASTERN REGION FOR THE PERIOD FROM APRIL-2018 TO MARCH-2019**

(ALL FIGURES IN MW & NET)

SL.NO	PARTICULARS	Apr-18	May-18	Jun-18	Jul-18	Aug-18	Sep-18	Oct-18	Nov-18	Dec-18	Jan-19	Feb-19	Mar-19
1	BIHAR												
i)	NET MAX DEMAND	4100	4200	4300	4300	4300	4450	4500	4300	3800	3800	3900	4300
ii)	NET POWER AVAILABILITY- Own Source	328	338	354	308	350	367	353	250	258	356	364	352
	Central Sector+Bi-Lateral	2908	2989	3031	3030	2973	3026	3070	2890	2651	2776	3025	2986
iii)	SURPLUS(+)/DEFICIT(-)	-864	-873	-915	-962	-977	-1057	-1077	-1160	-890	-667	-511	-962
2	JHARKHAND												
i)	NET MAX DEMAND	1240	1250	1270	1270	1280	1280	1300	1280	1250	1240	1250	1260
ii)	NET POWER AVAILABILITY- Own Source	296	341	341	262	262	386	386	341	341	341	341	341
	Central Sector+Bi-Lateral	602	632	647	641	600	615	652	607	564	582	632	622
iii)	SURPLUS(+)/DEFICIT(-)	-287	-220	-227	-310	-361	-224	-205	-277	-288	-261	-227	-240
3	DVC												
i)	NET MAX DEMAND (OWN)	2800	2800	2825	2750	2780	2850	2850	2800	2800	2800	2825	2825
ii)	NET POWER AVAILABILITY- OWN SOURCE	4889	4889	4706	4531	4696	4702	4888	4889	4889	4889	4741	4794
	- Central Sector+MPL	571	561	555	569	457	484	568	570	542	526	568	529
	BI-LATERAL EXPORT BY DVC	1564	1564	1537	1512	1443	1511	1410	1426	1384	1454	1474	1468
iii)	SURPLUS(+)/DEFICIT(-) AFTER EXPORT	1095	1085	900	839	930	825	1196	1233	1246	1161	1010	1030
4	ODISHA												
i)	NET MAX DEMAND	4300	4400	4400	4300	4300	4300	4200	4100	4100	4100	4200	4350
ii)	NET POWER AVAILABILITY- OWN+IPP+CPP	3327	3265	3210	3025	3282	3210	2940	2969	2756	2889	2963	3079
	- Central Sector	1145	1195	1230	1227	1158	1205	1245	1107	1095	1154	1239	1218
iii)	SURPLUS(+)/DEFICIT(-)	172	60	40	-48	139	115	-15	-24	-249	-57	2	-53
5	WEST BENGAL												
5.1	WBSEDCL												
i)	NET MAX DEMAND (OWN)	6097	5580	5960	5708	6220	6185	6354	4950	4777	5534	5507	6871
ii)	CESC's DRAWAL	0	0	0	0	0	0	0	0	0	0	0	0
iii)	TOTAL WBSEDCL'S DEMAND (incl. Export)	6102	5585	5970	5718	6230	6195	6364	4960	4787	5539	5512	6876
iv)	NET POWER AVAILABILITY- Own Source	3740	3690	3480	3456	3214	3373	3577	3255	3610	3375	3449	3632
	- Import from DPL	0	0	0	0	0	0	0	0	0	0	0	0
	- Central Sector+Bi-lateral+IPP&CPP+TLDP	2678	2297	2719	2283	2963	2820	2977	1949	1845	2559	2527	3583
v)	SURPLUS(+)/DEFICIT(-) AFTER EXPORT	316	402	229	21	-53	-2	190	244	668	395	464	339
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	272	274	275	268	274	270	251	249	240	243	247	262
ii)	NET POWER AVAILABILITY	387	428	465	379	379	465	465	465	363	363	465	465
iii)	SURPLUS(+)/DEFICIT(-)	115	154	190	111	105	195	214	216	123	120	218	203
5.3	CESC												
i)	NET MAX DEMAND	2050	2180	2220	1850	1880	2010	1990	1750	1500	1440	1650	1870
ii)	NET POWER AVAILABILITY - OWN SOURCE	750	750	750	750	750	750	750	670	450	670	670	710
	IMPORT FROM OTHER SOURCE (INCL. IPP/CPP -40 MW)	760	890	930	560	590	720	700	540	510	520	440	620
	IMPORT FROM HALDIA ENERGY LTD.	540	540	540	540	540	540	540	540	540	250	540	540
iii)	TOTAL AVAILABILITY	2050	2180	2220	1850	1880	2010	1990	1750	1500	1440	1650	1870
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)	8419	8034	8455	7826	8374	8465	8595	6949	6517	7217	7404	9003
ii)	NET POWER AVAILABILITY- Own Source	4877	4868	4695	4585	4343	4588	4792	4390	4423	4408	4584	4807
iii)	CS SHARE+BILATERAL+IPP/CPP+TLDP+HEL	3978	3727	4189	3383	4093	4080	4217	3029	2895	3329	3507	4743
iv)	SURPLUS(+)/DEFICIT(-) BEFORE WBSEDCL'S EXP.	436	561	429	142	62	203	414	470	801	520	687	547
v)	SURPLUS(+)/DEFICIT(-) AFTER WBSEDCL'S EXP.	431	556	419	132	52	193	404	460	791	515	682	542
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	152	157	157	156	156	158	158	150	122	127	156	156
iii)	SURPLUS(+)/DEFICIT(-)	73	77	82	81	82	83	83	68	35	40	68	71
8	EASTERN REGION												
	At 1.03 AS DIVERSITY FACTOR												
i)	NET MAX DEMAND	20334	20164	20713	19933	20504	20806	20903	18945	18017	18687	19096	21192
ii)	BI-LATERAL EXPORT BY DVC	1564	1564	1537	1512	1443	1511	1410	1426	1384	1454	1474	1468
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)	23078	22966	23126	21728	22379	22832	23280	21195	20538	21380	22121	23632
v)	PEAK SURPLUS(+)/DEFICIT(-) OF ER AFTER EXPORT (v = iv - i - ii - iii)	1176	1233	866	273	422	505	957	814	1128	1234	1546	967

**ABSTRACT OF STATEWISE/SYSTEMWISE/CONSTITUENTWISE OFF-PEAK DEMAND- vs- AVAILABILITY
IN EASTERN REGION FOR THE PERIOD FROM APRIL-2018 TO MARCH-2019**

(ALL FIGURES IN MW & NET)

SL.NO	PARTICULARS	Apr-18	May-18	Jun-18	Jul-18	Aug-18	Sep-18	Oct-18	Nov-18	Dec-18	Jan-19	Feb-19	Mar-19
1	BIHAR												
	i) NET MIN DEMAND	2800	2800	2900	2900	2900	3000	3000	3000	3100	3200	3200	3300
	ii) NET POWER AVAILABILITY- Own Source	326	326	326	297	332	346	326	279	286	326	320	326
	Central Sector+Bi-Lateral	1856	1944	1985	2314	2259	2214	2015	1857	1679	1784	1953	1919
	iii) SURPLUS(+)/DEFICIT(-)	-618	-530	-589	-289	-309	-441	-660	-865	-1135	-1091	-927	-1055
2	JHARKHAND												
	i) NET MIN DEMAND	945	971	971	971	971	971	998	998	998	998	998	998
	ii) NET POWER AVAILABILITY- Own Source	286	286	286	226	226	346	346	286	286	286	286	286
	Central Sector+Bi-Lateral	378	405	420	577	535	508	421	380	362	375	391	384
	iii) SURPLUS(+)/DEFICIT(-)	-281	-280	-265	-168	-210	-118	-231	-331	-349	-336	-321	-328
3	DVC												
	i) NET MIN DEMAND (OWN)	2236	2203	2243	2164	2203	2322	2215	2302	2247	2254	2255	2254
	ii) NET POWER AVAILABILITY- Own Source	3885	3885	3740	3591	3738	3728	3857	3885	3885	3885	3767	3809
	- Central Sector+MPL	442	430	427	571	460	465	441	438	427	416	433	395
	BI-LATERAL EXPORT BY DVC	1564	1564	1537	1512	1443	1511	1410	1426	1384	1454	1474	1468
	iii) SURPLUS(+)/DEFICIT(-)	528	549	387	486	552	360	674	595	682	594	472	482
4	ODISHA												
	i) NET MIN DEMAND	3300	3350	3300	3250	3250	3250	3150	3150	3000	2900	2900	3200
	ii) NET POWER AVAILABILITY- Own Source+CPP	2471	2603	2498	2708	2367	2535	2400	2454	2178	2297	2297	2297
	- Central Sector	827	881	918	1050	985	1019	930	815	819	868	900	886
	iii) SURPLUS(+)/DEFICIT(-)	-2	134	116	508	101	305	180	119	-4	265	297	-17
5	WEST BENGAL												
5.1	WBSEDCL												
	i) NET MIN DEMAND (OWN)	4820	3990	4413	4165	4177	4240	3611	2974	2794	3390	3721	4986
	ii) CESC'S DRAWAL	0	0	0	0	0	0	0	0	0	0	0	0
	iii) TOTAL WBSEDCL'S DEMAND (INCL. EXPORT)	4825	3995	4423	4175	4187	4250	3621	2984	2804	3395	3726	4991
	iv) NET POWER AVAILABILITY- OWN SOURCE	2840	2790	2580	2541	2297	2443	2604	2555	2635	2434	2486	2669
	- Import from DPL	0	0	0	0	0	0	0	0	0	0	0	0
	- Central Sector+Bi-lateral+IPP&CPP+TLDP	1857	1517	1809	2085	2009	1887	1482	1207	1265	1274	1336	2099
	v) SURPLUS(+)/DEFICIT(-) AFTER EXPORT	-128	312	-34	451	119	80	465	778	1096	313	96	-223
	vi) EXPORT TO BANGLADESH & SIKKIM	5	5	10	10	10	10	10	10	10	5	5	5
5.2	DPL												
	i) NET MIN DEMAND	245	247	248	241	247	243	226	224	216	219	222	236
	ii) NET POWER AVAILABILITY	308	339	369	301	301	369	369	369	339	339	434	369
	iii) SURPLUS(+)/DEFICIT(-)	63	93	122	60	55	126	143	145	123	120	212	133
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	405	603	603	639
	FROM/TO OTHER SOURCE EXP/IMP	293	358	293	253	158	293	233	-75	-97	-98	-230	269
	FROM HALDIA ENERGY LTD.	432	432	432	432	432	432	432	432	432	200	432	432
	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	6465	5702	6061	5766	5689	5883	5177	4158	3750	4314	4748	6562
	ii) NET POWER AVAILABILITY- Own Source	3823	3804	3624	3517	3273	3487	3648	3527	3379	3376	3523	3677
	CENTRAL SECTOR SHARE+BI-LATERAL+IPP&CPP+TLDP+HEL	2582	2307	2534	2770	2599	2612	2147	1564	1600	1376	1538	2800
	iii) SURPLUS(+)/DEFICIT(-) BEFORE WBSEDCL'S EXP.	-60	410	98	521	184	216	619	933	1229	438	313	-84
	SURPLUS(+)/DEFICIT(-) AFTER WBSEDCL'S EXP.	-65	405	88	511	174	206	609	923	1219	433	308	-89
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	69	78	82	141	140	143	81	65	62	65	68	68
	iii) SURPLUS(+)/DEFICIT(-)	19	28	32	91	90	93	31	15	7	10	13	13
8	EASTERN REGION												
	At 1.03 AS DIVERSITY FACTOR												
	i) NET MIN DEMAND	15336	14637	15073	14662	14624	15025	14164	13260	12767	13321	13743	15892
	ii) BILATERAL EXPORT BY DVC	1564	1564	1537	1512	1443	1511	1410	1426	1384	1454	1474	1468
	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)	16945	16950	16841	17763	16914	17402	16612	15550	14963	15054	15477	16847
	v) OFF-PEAK SURPLUS(+)/DEFICIT(-) OF ER AFTER EXPORT (v = iv- i - ii - iii)	41	744	221	1580	836	856	1027	854	803	274	254	-518

**ABSTRACT OF STATEWISE/SYSTEMWISE/CONSTITUENTWISE ENERGY REQUIREMENT- vs- AVAILABILITY
IN EASTERN REGION FOR THE PERIOD FROM APRIL-2018 TO MARCH-2019**

(ALL FIGURES IN MU & NET)

SL.NO	PARTICULARS	Apr-18	May-18	Jun-18	Jul-18	Aug-18	Sep-18	Oct-18	Nov-18	Dec-18	Jan-19	Feb-19	Mar-19	TOTAL 2017-18
1	BIHAR													
i)	NET ENERGY REQUIREMENT	2362	2419	2477	2477	2477	2563	2592	2477	2189	2189	2246	2477	28945
ii)	NET ENERGY AVAILABILITY- Own Source	191	198	196	206	208	203	205	192	197	201	182	200	2379
iii)	Central Sector+Bi-Lateral	1666	1810	1833	1967	1931	1900	1921	1648	1570	1631	1565	1723	21164
iv)	SURPLUS(+)/DEFICIT(-)	-505	-410	-448	-304	-338	-461	-466	-638	-421	-358	-498	-554	-5402
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	237	249	250	274	312	290	267	250	244	244	244	244	3107
iii)	Central Sector+Bi-Lateral	302	345	357	382	352	352	366	298	291	296	275	305	3920
iv)	SURPLUS(+)/DEFICIT(-)	-221	-174	-169	-94	-65	-78	-126	-192	-224	-219	-195	-220	-1977
3	DVC													
i)	NET ENERGY REQUIREMENT (OWN)	1695	1725	1700	1695	1725	1760	1735	1745	1760	1765	1595	1765	20665
ii)	NET ENERGY AVAILABILITY- OWN SOURCE	2845	2933	2760	2673	2803	2715	2926	2842	2933	2938	2575	2877	33820
iii)	Central Sector+MPL	353	371	375	416	336	344	394	347	339	326	304	313	4217
iv)	Bi- lateral export by DVC	1126	1164	1107	1125	1074	1088	1049	1027	1030	1082	991	1092	12955
v)	SURPLUS(+)/DEFICIT(-) AFTER EXPORT	377	415	328	269	340	211	536	417	482	416	293	332	4417
4	ODISHA													
i)	NET ENERGY REQUIREMENT	2520	2678	2628	2678	2604	2520	2455	2268	2344	2344	2150	2567	29756
ii)	NET ENERGY AVAILABILITY- OWN+IPP+CPP	1851	1824	1758	1794	1953	1937	1807	1518	1353	1560	1442	1670	20467
iii)	Central Sector	686	754	727	785	736	753	782	634	654	688	638	706	8543
iv)	SURPLUS(+)/DEFICIT(-)	17	-100	-143	-99	85	170	134	-116	-337	-96	-70	-191	-746
5	WEST BENGAL													
5.1	WBSEDCL													
i)	WBSEDCL'S OWN REQUIREMENT	3791	3556	3723	3547	3663	3588	3662	2577	2612	2955	2901	3671	40246
ii)	SUPPLY TO CESC	0	0	0	0	0	0	0	0	0	0	0	0	0
iii)	TOTAL ENERGY REQUIREMENT	3795	3560	3730	3554	3670	3595	3669	2584	2619	2959	2904	3689	40328
iv)	NET ENERGY AVAILABILITY- OWN SOURCE	2187	2216	1993	2032	1850	1897	2084	1977	2107	1954	1802	2135	24234
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	1565	1352	1704	1466	1681	1591	1533	997	986	973	1085	1458	16392
vii)	SURPLUS(+)/DEFICIT(-) AFTER EXPORT	-43	8	-33	-56	-139	-107	-52	390	474	-32	-17	-96	298
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	176	180	174	179	181	169	169	155	156	160	150	169	2018
ii)	NET ENERGY AVAILABILITY	317	343	342	261	253	317	327	348	269	266	302	350	3697
iii)	SURPLUS(+)/DEFICIT(-)	141	163	168	82	72	148	158	193	113	106	152	181	1679
5.3	CESC													
i)	NET ENERGY REQUIREMENT	1042	1159	1118	1016	1065	1064	989	742	694	680	675	862	11106
ii)	NET ENERGY AVAILABILITY - Own Source	525	543	528	522	523	508	532	372	351	427	398	492	5721
iii)	FROM OTHER SOURCE (INCL. IPP/CPP-29-30 MU/M)	156	225	211	135	170	184	120	71	60	57	39	66	1494
iv)	FROM HEL	361	391	379	359	372	372	337	299	283	196	238	304	3891
v)	TOTAL AVAILABILITY OF CESC	1042	1159	1118	1016	1065	1064	989	742	694	680	675	862	11106
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	5009	4895	5015	4742	4909	4821	4820	3474	3462	3795	3726	4702	53370
ii)	NET POWER AVAILABILITY- Own Source	3029	3102	2863	2815	2626	2722	2943	2697	2727	2647	2502	2977	33652
iii)	CS SHARE+BILATERAL+IPP/CPP+TLDP+HEL	2082	1968	2294	1960	2223	2147	1990	1367	1329	1226	1362	1828	21777
iv)	SURPLUS(+)/DEFICIT(-) BEFORE WBSEDCL'S EXP	102	176	142	33	-60	48	114	590	594	78	138	104	2059
v)	SURPLUS(+)/DEFICIT(-) AFTER WBSEDCL'S EXP.	98	172	135	26	-67	41	107	583	587	74	135	100	1991
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	71	89	97	105	104	104	93	65	59	59	55	65	967
iii)	SURPLUS(+)/DEFICIT(-)	40	58	71	78	78	77	65	29	23	23	22	30	595
8	EASTERN REGION													
i)	NET ENERGY REQUIREMENT OF ER	12420	12562	12667	12416	12518	12458	12437	10781	10593	10931	10502	12359	142644
ii)	BILATERAL EXPORT BY DVC	1126	1164	1107	1125	1074	1088	1049	1027	1030	1082	991	1092	12955
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)	13317	13649	13516	13383	13591	13475	13702	11860	11699	11817	11147	12911	154066
v)	ENERGY SURPLUS(+)/DEFICIT(-) OF ER AFTER EXPORT (v = iv - ii - iii)	-234	-81	-265	-165	-8	-78	209	45	69	-200	-349	-544	-1602