DELHI TRANSCO LTD.

STATE LOAD DISPATCH CENTER

PROGRESS REPORT

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DEC - 2019

1 SALIENT FEATURES OF DELHI POWER SYSTEM

Sr. No.	Features	DEC. 2018	DEC 2019
	Effective Generation Capacity within Delhi in MW		
1	Rajghat Power House	135	135
	Gas Turbine	270	270
	Pragati Power Corporation Ltd.	330	330
	Badapur Thermal Power Station	705	0
	Rithala GT	108	0
	Bawana	1372	1372
	TOWMCL (Waste to Energy plant)	16	16
	EDWPCL (Waste to Energy plant)	10	10
	MSW BAWANA (Waste to Energy plant)	24	24
	Total	2970	2157
2	**Maximum Unrestricted Demand (MW)**	**4417**	**5261**
	Date	28.12.2018	31.12.2019
	Time	10.01.49	10.45.48
3	**Peak Demand met (MW)**	**4417**	**5245**
	Date	28.12.2018	31.12.2019
	Time	10.01.49	10.45.48
4	Peak Availability (MW)	4200	5127
5	Shortage (-) / Surplus (+) in MW	(-) 217	(-) 118
6	Percentage Shortage (-) / Surplus (+)	(-) 4.91	(-) 3.43
7	Maximum Energy Consume in a day (Mus)	73.674	85.866
8	Energy Consumed during the month	**1997.717**	**2151.070**
9	**Load Shedding in Mus**		
A)	Due to Grid Restrictions		
i)	Under Frequency Relay Operations	0.000	0.000
ii)	Manual Load shedding from DTL S/Stns.	0.000	0.000
iii)	Load Shedding due to low frequency / Low Voltage / TTC/ATC Violation		
	NDPL	0.102	0.000
	BRPL	0.000	0.000
	BYPL	0.000	0.000
	NDMC	0.000	0.000
	MES	0.000	0.000
iv)	Due to transmission Constraints in Central Sector	0.000	0.000
	Total due to Grid Restriction	**0.102**	**0.000**
B)	Due to Constraints in System in Mus		
	DTL	0.200	0.128
	NDPL	0.131	0.046
	BRPL	0.017	0.248
	BYPL	0.155	0.016
	NDMC	0.000	0.000
	MES	0.000	0.000
	Other Agencies	0.000	0.002
	Total	**0.503**	**0.440**
11	**Grand Total in Mus**	**0.606**	**0.440**

2. PERFORMANCE OF GENERATING STATIONS WITHIN DELHI DURING DEC 2019

A) For the month of Dec 2019

All Figures in MUs

S. No	Stations	Gross Generation	Aux. Consumption	Net Generation	Availability (%)	Backing Down
1.	**RPH**	0.000	0.125	-0.125	0.00	0.00
2.	**GT**	34.912	1.484	33.428	92.40	146.61
3.	**PPCL**	120.255	2.406	117.849	103.07	127.06
4.	**BTPS**	0.000	0.520	-0.520	0.00	0.00
5.	**Rithala**	0.000	0.000	0.000	0.00	0.00
6.	**Bawana**	262.107	9.354	252.753	92.78	667.50
7.	**Towmcl**	13.493	1.697	11.796	--	--
8.	**EDWPCL**	3.773	0.941	2.832	--	--
9.	**DMSWL**	9.637	1.730	7.907	--	--
	TOTAL	**444.177**	**18.257**	**425.92**	**--**	**941.17**

B) For the Year 2019-20 (Upto Dec 2019)

Power Station	Effective Capacity (MW)	Net Generation in MUs for Dec 2019	Availability (%) for Dec 2019	PLF (%) for Dec 2019	Cumulative Generation in MUs upto Dec 2019 for the year 2019-20	Cumulative Availability in % upto Dec 2019 for the year 2019-20	Cumulative PLF in % upto Dec 2019 for the year 2019-20
RPH	135	-0.125	0.00	0.00	-1.125	0.00	-0.07
GT	270	33.428	92.40	17.15	397.377	86.25	54.97
PPCL	330	117.849	103.07	49.71	1149.694	95.80	54.53
BTPS	705	-0.520	0.00	0.00	-5.264	0.00	0.00
Rithala	108	0.000	0.00	0.00	0.000	0.00	0.00
Bawana	1372	252.753	92.78	26.28	312.556	86.63	34.67
Towmcl	16	11.796	--	117.13	112.637	0.00	0.00
EDWPCL	--	2.832	--	43.67	22.371	0.00	0.00
DMSWL	--	7.907	--	55.77	92.033	0.00	0.00
TOTAL	2936	**425.92**	**--**	**--**	**2080.279**	0.00	0.00

3 DETAILS OF OUTAGES OF GENERATING STNS. WITHIN DELHI W.E.F. APRIL 2019

(A) RPH

Unit No	Capacity in MW	Outage		Synchronization		Reason of Outage
		Date	Time	Date	Time	
1	67.5	08.05.15	13.40	Contd.		Not in operation due to not meeting pollution norms.

Unit No	Capacity in MW	Outage		Synchronization		Reason of Outage
		Date	Time	Date	Time	
2	67.5	21.05.15	10.20	Contd.		Not in operation due to not meeting pollution norms.

(B) Gas Turbine

Unit No	Capacity in MW	Outage		Synchronization		Reason of Outage
		Date	Time	Date	Time	
1	30	12.06.19	08.28	12.06.19	12.15	unit tripped due to Electrical trouble normal shut down.
		09.08.19	12.47	09.08.19	15.45	Unit tripped due to tripping of 66kV Switch yard.
		27.08.19	15.05	27.08.19	20.20	Unit tripped due to tripping of generator.
		10.09.19	19.55	11.09.19	17.44	Unit tripped due to rotating diode faulty.
		28.09.19	01.35	28.09.19	02.30	Unit tripped due to field failure.
		22.10.19	10.00	08.11.19	19.15	Hot gas path inspection.
		28.11.19	13.30	28.11.19	14.32	Tripped due to failure of I/O Pack.

Unit No	Capacity in MW	Outage		Synchronization		Reason of Outage
		Date	Time	Date	Time	
2	30	01.06.19	16.45	01.06.19	20.00	Unit tripped on Electrical trouble Normal shut down alarms.
		01.07.19	22.06	01.07.19	23.40	Electrical trouble normal shutdown
		02.07.19	01.30	02.07.19	22.20	Electrical trouble normal shutdown
		09.08.19	12.47	09.08.19	15.45	Unit tripped due to tripping of 66kV Switch yard.
		30.09.19	06.42	30.09.19	08.05	Unit tripped due to battery under voltage.
		11.10.19	09.00	19.10.19	15.30	Combustion inspection.
		13.12.19	15.40	13.12.19	16.16	Tripped due to grounding of C&I GT cables
		30.12.19	05.42	30.12.19	06.22	Tripped due to 160MVA Tr. tripped

Unit No	Capacity in MW	Outage		Synchronization		Reason of Outage
		Date	Time	Date	Time	
3	30	12.04.19	02.25	12.04.19	04.40	Machine tripped due to fault occurred in high vibration pick up.

Unit No	Capacity in MW	Outage		Synchronization		Reason of Outage
		Date	Time	Date	Time	
4	30	Nil				

Unit No	Capacity in MW	Outage		Synchronization		Reason of Outage
		Date	Time	Date	Time	
5	30	27.05.19	11.08	27.05.19	12.54	Tripped due to Electrical trouble

Unit No	Capacity in MW	Outage		Synchronization		Reason of Outage
		Date	Time	Date	Time	
6	30	30.04.19	01.18	30.04.19	02.05	Machine tripped due to malfunctioning of IP pack
		02.05.19	16.08	02.05.19	17.37	Tripped due to failue of communication I/O pack.
		19.06.19	17.58	19.06.19	19.18	Unit tripped on heavy jerk.
		21.07.19	16.16	21.07.19	17.55	Electrical trouble.

Unit No	Capacity in MW	Outage		Synchronization		Reason of Outage
		Date	Time	Date	Time	
STG -1	30	09.04.19	08.00	28.05.19	20.32	Major overhauling.
		01.06.19	21.15	02.06.19	19.15	Machine out due ot axial shift problem.
		03.06.19	12.00	12.06.19	17.45	
		09.08.19	12.47	10.08.19	22.30	Unit tripped due to tripping of 66kV Switch yard.
		28.08.19	14.28	28.08.19	15.55	Gen. differential trip.
		29.08.19	10.15	29.08.19	13.15	Tripped on false alarm.
		05.12.19	17.19	05.12.19	18.15	Tripped on low condenser vaccum
		13.12.19	15.40	13.12.19	16.16	Tripped due to tripping of GT-2
		30.12.19	05.42	30.12.19	06.22	

Unit No	Capacity in MW	Outage		Synchronization		Reason of Outage
		Date	Time	Date	Time	
STG -2	30	11.05.19	17.55	11.05.19	20.05	Unit tripped due to Class A channel I&2 trip.
		05.06.19	02.14	05.06.19	04.01	Unit tripped due to durm level disturbance.
		20.09.19	09.00	03.10.19	21.20	Minor inspection.

Unit No	Capacity in MW	Outage		Synchronization		Reason of Outage
		Date	Time	Date	Time	
STG -3	30	05.04.19	01.15	05.04.19	02.15	Machine triped on durm level very high.
		02.05.19	23.45	03.05.19	05.15	Tripped due to faulty relay.
		07.06.19	21.55	08.06.19	02.04	Unit tripped due to Hotwell level very high. Lube oil Press. LOW and Class A trip relay alarm also appeared.
		19.06.19	17.58	19.06.19	20.48	Unit tripped on heavy jerk.
		12.07.19	10.50	12.07.19	12.08	Low vaccume pressure
		15.07.19	16.55	15.07.19	17.29	Tripped due to drum level very high.
		21.07.19	16.16	21.07.19	18.50	Unit tripped with Unit #6
		29.08.19	14.20	29.08.19	15.15	Tripped due to drum level high
		11.09.19	07.01	11.09.19	07.50	Unit tripped due to low vaccume
		19.10.19	19.35	19.10.19	20.25	AVR Fuse failure
		20.10.19	13.50	20.10.19	15.07	VT Fuse fail, Class A relay operation
		26.10.19	07.34	26.10.19	08.02	
		30.10.19	10.23	30.10.19	11.11	
		11.11.19	14.39	11.11.19	15.27	Unit tripped oil pressure very low, VT Fuse failure.
		09.12.19	08.56	09.12.19	11.30	Tripped on low condenser vaccum

(C) PRAGATI

Unit No	Capacity in MW	Outage		Synchronization		Reason of Outage
		Date	Time	Date	Time	
1	104	01.04.19	00.00	05.04.19	08.04	Stopped due to low demand and high frequency
		24.04.19	00.00	25.04.19	00.14	
		25.04.19	00.47	01.05.19	16.54	Not scheduled due to available in Open cycle.
		03.05.19	04.15	10.05.19	13.52	Stopped due to low demand and high frequency
		17.05.19	22.30	29.05.19	12.32	
		19.06.19	18.02	19.06.19	18.25	Grid disturbance
		21.06.19	10.05	21.06.19	11.15	Stopped to attend hot point by DTL.
		17.07.19	08.08	19.07.19	09.15	Stopped due to low demand and high frequency
		19.07.19	09.15	19.07.19	18.00	Change Air Filters
		19.07.19	18.00	20.07.19	11.11	Stopped due to low demand and high frequency
		06.08.19	11.51	08.08.19	21.02	
		10.08.19	00.00	27.08.19	18.19	
		12.09.19	02.07	21.09.19	12.24	
		30.12.19	05.33	30.12.19	06.10	Stopped due to high DP.
		30.12.19	06.10	31.12.19	23.59	Stopped due to low demand and high frequency

Unit No	Capacity in MW	Outage		Synchronization		Reason of Outage
		Date	Time	Date	Time	
2	104	05.04.19	17.03	22.04.19	21.19	Stopped due to low demand and high frequency
		10.05.19	15.56	10.05.19	17.00	GT-2 swapped with GT-1
		10.05.19	17.00	10.05.19	18.00	DC reduced for un wrapping inlet air filters.
		10.05.19	18.00	20.05.19	14.39	Stopped due to low demand and high frequency
		18.06.19	00.08	19.06.19	14.37	
		25.07.19	15.30	05.08.19	20.43	
		30.08.19	13.06	10.09.19	20.43	
		21.09.19	12.24	16.10.19	18.00	Unit swapped by GT-#1
		16.10.19	18.00	20.10.19	19.45	Withdraw planned mtc
		20.10.19	19.45	20.11.19	06.39	Stopped due to low demand and high frequency
		21.11.19	00.00	28.12.19	08.58	
		28.12.19	20.00	30.12.19	06.10	

Unit No	Capacity in MW	Outage		Synchronization		Reason of Outage
		Date	Time	Date	Time	
STG	122	01.04.19	00.00	01.04.19	08.15	Unit stopped for MI
		14.04.19	16.50	15.04.19	04.45	Attending governing system.
		03.05.19	01.34	03.05.19	04.02	Internal fault
		17.05.19	22.30	20.05.19	17.57	Stopped due to low demand and high frequency
		19.07.19	04.55	19.07.19	06.27	Tripped due to grid disturbance
		30.07.19	09.10	30.07.19	10.06	Internal fault
		05.09.19	14.40	05.09.19	19.11	
		21.09.19	13.10	21.09.19	14.10	
		26.10.19	09.09	26.10.19	10.17	Tripped due to grid disturbance
		02.12.19	12.35	02.12.19	13.29	Internal fault
		27.12.19	13.25	27.12.19	14.14	Tripped due to grid disturbance
		30.12.19	05.33	30.12.19	08.03	Unit tripped with G.T. #1

(D) BAWANA CCGT POWER STATION

Unit	Capacity in MW	Outage		Synchronization		Reason of Outage
		Date	Time	Date	Time	
1	216	01.05.19	10.00	01.05.19	12.00	Transformer testing by PGCIL
		01.05.19	12.00	02.05.19	18.00	
		26.06.19	10.09	26.06.19	11.22	Machine Tripped on Guillotine damper feedback close .
		07.08.19	07.09	07.08.19	11.37	Fault alarm appeared.
		07.09.19	06.05	07.09.19	12.10	High DP.
		17.11.19	06.15	20.11.19	12.00	
		11.12.19	10.00	11.12.19	18.00	Boroscopic Inspection of GT # 1
		21.12.19	17.51	21.12.19	20.56	Loss of flame
		27.12.19	23.19	28.12.19	02.50	Due to problem in 400 KV Bus 2 at CCGT Bawana switchyard and damage in gen ckt brkr of STG 1 ,

Unit	Capacity in MW	Outage		Synchronization		Reason of Outage
		Date	Time	Date	Time	
2	216	21.06.19	17.30	21.06.19	21.42	Machine stopped for attending oil leakage in trip oil line.
		07.09.19	07.00	08.09.19	06.00	High intake air filter fault.
		12.11.19	13.30	12.11.19	17.32	GT#2 tripped on High exhaust spread due to cold zone in TTX 18-22
		15.11.19	00.18	15.11.19	14.05	Unit unloaded on high DP

Unit	Capacity in MW	Outage		Synchronization		Reason of Outage
		Date	Time	Date	Time	
STG-1	254	01.05.19	00.00	01.05.19	12.00	Transformer testing by PGCIL
		15.05.19	07.42	18.05.19	12.00	Dislodging of R phaee CT of excitation transformer from its base plate and filling on transformer enclosure was cause of tripping.
		11.06.19	13.35	11.06.19	15.41	Machine Tripped on closure of HPMS-39.
		26.06.19	10.09	26.06.19	12.02	Machine Tripped on Guillotine damper feedback close .
		04.08.19	16.25	04.08.19	23.40	Tripped due to control oil leakage.
		07.08.19	12.35	07.08.19	12.35	Unit tripped due to GT Unit f#3 tripped
		11.08.19	00.05	11.08.19	11.39	Oil level very low, oil leakage.
		12.11.19	14.02	12.11.19	18.10	Half of STG taken out of DC due trip of GT#2
		15.11.19	00.18	15.11.19	14.05	Half of STG taken out of DC due unloading of GT#2
		17.11.19	06.15	20.11.19	12.00	Half of STG taken out of DC due tripping of GT#1
		11.12.19	10.00	11.12.19	18.00	Boroscopic Inspection of GT # 1
		21.12.19	17.51	21.12.19	20.56	Loss of flame
		27.12.19	23.19	28.12.19	02.50	Due to problem in 400 KV Bus 2 at CCGT Bawana switchyard and damage in gen ckt brkr of STG 1 ,

Unit	Capacity in MW	Outage		Synchronization		Reason of Outage
		Date	Time	Date	Time	
3	216	29.04.19	20.18	29.04.19	21.37	Malfunctioning of compressor bleed valve brought machine on FSNL.
		02.05.19	12.16	02.05.19	12.54	Machine came on FSNL itself due to problem in excitation.
		27.05.19	11.58	27.05.19	13.41	Gas leakage
		03.08.19	13.31	03.08.19	13.31	Tripped due to high DP
		17.08.19	10.00	17.08.19	18.00	Boroscopic inspection by OEM.
		29.08.19	18.00	30.08.19	01.15	Unit tripped due to generator proection.
		21.10.19	00.00	26.10.19	18.00	Attended leakage of Hydrogen from Generator cooler,Seal oil system line modification work done.
		28.12.19	06.15	28.12.19	19.00	Due to problem in 400KV Bus 2 at CCGT Bawana switchyard and damage in gen ckt brkr of STG 1 ,

Unit	Capacity in MW	Outage		Synchronization		Reason of Outage
		Date	Time	Date	Time	
4	216	01.04.19	00.00	04.04.19	13.00	Unit kept out due to leakage of pressure.
		04.04.19	13.00	08.04.19	20.00	
		19.09.19	11.12	19.09.19	15.00	Loss of flame.
		09.10.19	14.00	20.10.19	23.59	Mastr Trip relay upgradation and diverter damper seal replacement & rectification.
		16.12.19	04.38	16.12.19	17.05	Unit taken out of DC due to High Inlet Air DP i.e. 8.03
		28.12.19	06.15	28.12.19	19.00	Due to problem in 400KV Bus 2 at CCGT Bawana switchyard and damage in gen ckt brkr of STG 1 ,

Unit	Capacity in MW	Outage		Synchronization		Reason of Outage
		Date	Time	Date	Time	
STG-2	254	01.04.19	00.00	04.04.19	13.00	Replacement of R phase bushing of STGT Transformer.
		15.05.19	07.44	15.05.19	13.21	Unit tripped on instantaneous high set element of stand by E/F protection of generator transformer
		27.05.19	11.58	27.05.19	14.00	Gas leakage.
		03.07.19	22.30	04.07.19	16.30	Oil leakage in JOP Line.
		26.07.19	12.15	26.07.19	13.33	STG#2 tripped at 12:15 hrs.Fault in B-phase of ICT-2 of 400 KV, DTL led to heavy fault current which led to tripping of STG#2.Settings of overhead differential relays have been reviewd to avoid fault outside the zone of Transformer Protection.
		03.08.19	11.48	03.08.19	13.44	Due tripping of GT-2
		17.08.19	10.00	17.08.19	18.00	Boroscopic inspection by OEM.
		29.08.19	18.00	30.08.19	01.15	Unit tripped due to generator proection.
		09.10.19	14.00	14.10.19	06.00	GT#4 under PO so half STG taken out from DC
		14.10.19	06.00	21.10.19	13.30	Planned Outage of condenser cleaning
		21.10.19	13.30	26.10.19	18.00	GT#3 under PO so half STG taken out from DC
		16.11.19	09.48	16.11.19	12.15	Unit tripped on Generator stator earth fault protection
		16.12.19	04.38	17.12.19	00.00	Taken out of DC due to problem in HP #4 valve in HRSG #4.
		28.12.19	06.15	30.12.19	14.00	Due to problem in 400KV Bus 2 at CCGT Bawana switchyard and damage in gen ckt brkr of STG 1 ,

4 ALLOCATION OF POWER TO DELHI

A) Time block 00.00hrs. to 24.00hrs. @ 0% allocation from Unallocated Quota from 01.09.2019

Name of the Stn	Installed capacity	Total Un-allocated	Basic Allocation	Basic Allocation at periphery	Allocation out of Unallocated Quota	Allocation out of Un-allocation Quota at Delhi periphery	Total allocation at Delhi periphery
1	2	3	4	5	6	7	(8)=(5)+(7)
NTPC STATIONS							
Singrauli STPS	2000	300	150	134	0	0	134
Rihand-I	1000	150	100	89	0	0	89
Rihand Stage -II	1000	150	126	115	0	0	115
Rihand Stage -III	1000	150	132	120	0	0	120
ANTA GPS	419	63	44	41	0	0	41
Auriya GPS	663.36	99	72	68	0	0	68
Dadri GPS	829.78	129	91	86	0	0	86
Dadri NCTPS (Th)	840	0	756	668	0	0	668
Dadri NCTPS (Th) Stage-II	980	147	152	139	0	0	139
Unchahaar-I TPS	420	20	24	21	0	0	21
Unchahaar-II TPS	420	63	47	41	0	0	41
Unchahaar-III TPS	210	31	29	25	0	0	25
Unchahaar-IV TPS	500	75	0	0	0	0	0
TOTAL	**10282**	**1377**	**1723**	**1546**	**0**	**0**	**1546**
NHPC							
Baira Suil HPS	180	0	20	19	0	0	19
Salal HPS	690	0	80	77	0	0	77
Tanakpur HEP	94	0	12	12	0	0	12
Chamera HEP	540	0	43	41	0	0	41
Chamera-II HEP	300	54	40	38	0	0	38
Chamera-III HEP	231	35	29	28	0	0	28
URI-I HEP	480	0	53	51	0	0	51
URI-II HEP	240	0	32	31	0	0	31
Sewa HEP	120	18	16	15	0	0	15
Dhauli Ganga HEP	280	42	37	35	0	0	35
Dulhasti HEP	390	58	50	48	0	0	48
Parbati-III HEP	520	66	66	63	0	0	63
Singrauli small hydro	8	0	1.53	1	0	0	1
TOTAL	**4073**	**272**	**480**	**458**	**0**	**0**	**458**
NPC							
Narora APS	440	64	47	40	0	0	40
RAPP (C)	440	64	56	49	0	0	49
TOTAL	**880**	**128**	**103**	**88**	**0**	**0**	**88**
SJVNL							
Nathpa Jhakri HEP	1500	149	142	135	0	0	135
THDC							
Tehri Hydro	1000	99	63	60	0	0	60
Koteshwar HEP	400	40	39	38	0	0	38
TOTAL	**1400**	**139**	**102**	**98**	**0**	**0**	**98**
Total	**18135**	**2065**	**2550**	**2326**	**0**	**0**	**2326**
Allocation from ER and Tala HEP							
Farakka	1600	0	22	20	0	0	20
Kahalgaon	840	0	51	45	0	0	45
Tala HEP	1020	153	30	29	0	0	29
Kahalgaon-II	1500	0	157	139	0	0	139
Total ER	**4960**	**153**	**261**	**232**	**0**	**0**	**232**
Joint Venture							
Jhajjar TPS	1500	114	693	634	0	0	634
Ultra Mega Projects							
Sasan	3960	0	446	404	0	0	404
Grand Total	**28555**	**2332**	**3949**	**3596**	**0**	**0**	**3596**

5 ALLOCATION OF POWER TO DISCOMS

A) ALLOCATION OF POWER TO VARIOUS LISCENCEES AS PER ORDER OF DERC AND DECISION OF GNCTD FOR ALLOCATION OF CENTRAL SECTOR STATIONS (DADRI THERMAL & BTPS) AND STATE SECTOR GENERATING STATIONS w.e.f. 06.08.2013.

(Allocation In %)

(A) 10.00hrs. to 17.00hrs.

SOURCES	LICENSEES					
	NDMC	MES	NDPL	BRPL	BYPL	TOTAL
1. Central Sector without Dadri (Th)	0	0	29.18	43.58	27.24	100.00
2. Dadri (Th)	16.63	0	24.22	36.86	22.39	100.00
3. BTPS	17.73	7.09	21.81	33.2	20.17	100.00
4. RPH	0	0	29.025	44.133	26.842	100.00
5. GT	0	0	29.02	44.16	26.82	100.00
6. Pragati	30.3	0	20.22	30.78	18.7	100.00
7. DVC	0	0	29.18	43.58	27.24	100.00
8. BAWANA CCGT*	7.30	1.82	20.688	30.888	19.304	80.00

(B) 00.00hrs. to 10.00hrs. and 17.00hrs. to 24.00hrs.

SOURCES	LICENSEES					
	NDMC	MES	NDPL	BRPL	BYPL	TOTAL
1. Central Sector without Dadri (Th)	0	0	29.18	43.58	27.24	100.00
2. Dadri (Th)	16.53	0	24.22	36.86	22.39	100.00
3. BTPS	17.73	7.09	21.81	33.2	20.17	100.00
4. RPH	0	0	29.025	44.133	26.842	100.00
5. GT	0	0	29.02	44.16	26.82	100.00
6. Pragati	30.3	0	20.22	30.78	18.7	100.00
7. DVC	0	0	29.18	43.58	27.24	100.00
8. BAWANA CCGT*	7.30	1.82	20.688	30.888	19.304	80.00

* 20% POWER OF BAWANA CCGT ALLOCATED TO HARYANA (10%) & PUNJAB (10%)

6 POWER AVAILABILITY-DEMAND POSITION AT THE TIME OF PEAK DEMAND MET DURING DECEMBER 2019

Date	Time of peak demand			Generation within Delhi							Import from the Grid	Schedule from the Grid	OD(-) / UD(+)	Demand met	Shedding	Un-Restricted Demand
		RPH	GT	PPCL	Bawana	Townmcd	East Delhi	DMS WL	BTPS	Total						
(1)	(2)	(3)	(4)	(5)	(7)	(8)				(9)= (3) to (8)	(10)	(11)	(12)= (11) - (10)	(13)= (11)+ (12)	(14)	(15)= (13)+ (14)
1	09.47.58	0	38	154	256	14	9	14	0	485	2915	2821	94	3400	0	3400
2	10.00.59	0	38	155	256	14	7	12	0	482	3013	3028	-15	3495	0	3495
3	10.03.42	0	37	151	254	14	1	14	0	471	3115	3028	87	3586	0	3586
4	10.30.29	0	38	152	293	19	5	13	0	520	3119	3048	71	3639	0	3639
5	10.43.59	0	38	158	255	12	6	15	0	484	3090	3081	9	3574	0	3574
6	10.27.44	0	39	156	277	18	3	7	0	500	3293	3158	135	3793	0	3793
7	10.29.13	0	39	157	254	12	5	6	0	473	3073	3023	50	3546	0	3546
8	10.53.46	0	41	154	277	10	-1	12	0	493	3102	3036	66	3595	0	3595
9	11.00.50	0	93	155	322	13	5	15	0	603	2997	2865	132	3600	0	3600
10	09.38.52	0	41	156	293	10	7	15	0	522	3143	3048	95	3665	0	3665
11	10.15.29	0	41	156	293	8	5	13	0	516	3335	3206	129	3851	0	3851
12	09.57.12	0	41	157	319	16	4	17	0	554	3182	3156	26	3736	0	3736
13	10.24.07	0	40	157	271	16	0	18	0	502	3473	3285	188	3975	0	3975
14	10.02.29	0	40	157	310	10	5	14	0	536	3332	3203	129	3868	0	3868
15	10.51.41	0	41	157	288	12	3	15	0	516	3358	3297	61	3874	0	3874
16	10.15.41	0	67	156	318	17	5	16	0	579	3359	3413	-54	3938	0	3938
17	10.00.45	0	82	155	433	16	-1	15	0	700	3379	3296	83	4079	0	4079
18	10.23.39	0	50	155	433	17	-1	14	0	668	3644	3548	96	4312	0	4312
19	10.50.53	0	40	153	516	16	6	13	0	744	3512	3515	-3	4256	0	4256
20	10.48.25	0	40	155	633	16	5	3	0	852	3776	3598	178	4628	0	4628
21	10.48.25	0	40	156	487	15	10	8	0	716	3486	3393	93	4202	0	4202
22	11.00.48	0	40	158	500	13	-1	14	0	724	3622	3540	82	4346	0	4346
23	11.15.02	0	40	153	447	16	3	7	0	666	3822	3652	170	4488	0	4488
24	10.19.56	0	40	157	531	16	1	4	0	749	3887	3724	163	4636	0	4636
25	10.53.52	0	40	156	647	16	2	4	0	865	3905	3564	341	4770	0	4770
26	11.35.00	0	40	155	638	16	4	-1	0	852	4068	3814	254	4920	0	4920
27	10.11.08	0	40	157	652	16	4	-1	0	868	4108	3891	217	4976	0	4976
28	11.01.21	0	40	320	238	15	4	-1	0	616	4093	4145	-52	4709	9	4718
29	11.30.40	0	42	155	259	17	4	-1	0	476	4356	4248	108	4832	0	4832
30	10.43.00	0	42	150	253	16	3	0	0	464	4596	4509	87	5060	0	5060
31	10.45.48	0	42	148	310	15	3	0	0	518	4727	4609	118	5245	16	5261

7 POWER AVAILABILITY- DEMAND POSITION AT THE TIME OF MAXIMUM UNRESTRICTED DEMAND DURING DECEMBER 2019

Date	Time of peak demand			Generation within Delhi							Import from the Grid	Schedule from the Grid	OD(-) / UD(+)	Demand met	Shedding	Un-Restricted Demand
		RPH	GT	PPCL	Bawana	Townmcl	East Delhi	DMSWL	BTPS	Total						
(1)	(2)	(3)	(4)	(5)	(7)	(8)				(9)= (3) to (8)	(10)	(11)	(12)= (11) - (10)	(13)= (11)+ (12)	(14)	(15)= (13)+ (14)
1	09.47.58	0	38	154	256	14	9	14	0	485	2915	2821	94	3400	0	3400
2	10.00.59	0	38	155	256	14	7	12	0	482	3013	3028	-15	3495	0	3495
3	10.03.42	0	37	151	254	14	1	14	0	471	3115	3028	87	3586	0	3586
4	10.30.29	0	38	152	293	19	5	13	0	520	3119	3048	71	3639	0	3639
5	10.43.59	0	38	158	255	12	6	15	0	484	3090	3081	9	3574	0	3574
6	10.27.44	0	39	156	277	18	3	7	0	500	3293	3158	135	3793	0	3793
7	10.29.13	0	39	157	254	12	5	6	0	473	3073	3023	50	3546	0	3546
8	10.53.46	0	41	154	277	10	-1	12	0	493	3102	3036	66	3595	0	3595
9	11.00.50	0	93	155	322	13	5	15	0	603	2997	2865	132	3600	0	3600
10	09.38.52	0	41	156	293	10	7	15	0	522	3143	3048	95	3665	0	3665
11	10.15.29	0	41	156	293	8	5	13	0	516	3335	3206	129	3851	0	3851
12	09.57.12	0	41	157	319	16	4	17	0	554	3182	3156	26	3736	0	3736
13	10.24.07	0	40	157	271	16	0	18	0	502	3473	3285	188	3975	0	3975
14	10.02.29	0	40	157	310	10	5	14	0	536	3332	3203	129	3868	0	3868
15	10.51.41	0	41	157	288	12	3	15	0	516	3358	3297	61	3874	0	3874
16	10.15.41	0	67	156	318	17	5	16	0	579	3359	3413	-54	3938	0	3938
17	10.00.45	0	82	155	433	16	-1	15	0	700	3379	3296	83	4079	0	4079
18	10.23.39	0	50	155	433	17	-1	14	0	668	3644	3548	96	4312	0	4312
19	10.50.53	0	40	153	516	16	6	13	0	744	3512	3515	-3	4256	0	4256
20	10.48.25	0	40	155	633	16	5	3	0	852	3776	3598	178	4628	0	4628
21	10.48.25	0	40	156	487	15	10	8	0	716	3486	3393	93	4202	0	4202
22	11.00.48	0	40	158	500	13	-1	14	0	724	3622	3540	82	4346	0	4346
23	11.15.02	0	40	153	447	16	3	7	0	666	3822	3652	170	4488	0	4488
24	10.19.56	0	40	157	531	16	1	4	0	749	3887	3724	163	4636	0	4636
25	10.53.52	0	40	156	647	16	2	4	0	865	3905	3564	341	4770	0	4770
26	11.35.00	0	40	155	638	16	4	-1	0	852	4068	3814	254	4920	0	4920
27	10.11.08	0	40	157	652	16	4	-1	0	868	4108	3891	217	4976	0	4976
28	11.01.21	0	40	320	238	15	4	-1	0	616	4093	4145	-52	4709	9	4718
29	11.30.40	0	42	155	259	17	4	-1	0	476	4356	4248	108	4832	0	4832
30	10.43.00	0	42	150	253	16	3	0	0	464	4596	4509	87	5060	0	5060
31	10.45.48	0	42	148	310	15	3	0	0	518	4727	4609	118	5245	16	5261

8 SOURCEWISE SCHEDULED DRAWL FROM NORTHERN GRID AS WELL AS AVAILABILITY WITHIN DELHI FOR DECEMBER 2019

A) AVAILABILITY FROM GENCO AND PRAGATI STNs. (all fig in MUs)

A (i) RPH	0.000
(ii) GT+STG	34.912
(iii) PRAGATI	120.255
(iv) RITHALA	0.000
(v) BAWANA CCGT	262.107
(vi) Timarpur – Okhla	13.493
EDWPCL	3.773
DMSWL	9.637
TOTAL	444.177
B) AVAILABILITY FROM BTPS	-0.520
C) AUXILIARY CONSUMPTION OF GENERATING STNs. EXCLUDING BTPS	17.737
D) NET GENERATION AVAILABLE WITHIN DELHI(A+B-C)	**425.920**

B) SOURCE WISE SCHEDULED DRAWL FROM THE NORTHERN GRID

NAME OF THE STATION	AVAILABILITY AT POWER PLANT	AVAILABILITY AT DELHI PERIPHERY	ALLOCATION MADE BY NRLDC AT POWER PLANT	ALLOCATION MADE BY NRLDC AT DELHI PERIPHERY
B/SUIL	2.709	2.641	2.709	2.641
SALAL	15.733	15.302	15.733	15.302
SASAN	307.668	298.496	307.668	298.496
TANKAPUR	3.147	3.046	3.147	3.046
CHAMERA	6.322	6.165	6.322	6.165
CHAMERA -II	5.945	5.783	5.945	5.783
CHAMERA -III	3.326	3.243	3.310	3.227
DHAULIGANGA	4.856	4.700	4.856	4.700
SEWA -2	4.532	4.407	4.532	4.407
URI	30.603	29.773	30.603	29.773
URI-II	19.336	18.856	19.336	18.856
KOLDAM	0.000	0.000	0.000	0.000
KOTESHWAR	8.229	7.964	8.229	7.964
PARBATI3	1.896	1.844	1.896	1.844
RAMPUR	0.000	0.000	0.000	0.000
ANTA (GAS)	0.143	0.136	0.000	0.000
ANTA (RLNG)	5.945	5.697	6.035	5.783
ANTA (LIQUID)	0.000	0.000	0.000	0.000
DADRI (GAS)	4.578	4.463	3.248	3.167
DADRI (RLNG)	60.544	59.050	0.016	0.016
DADRI (LIQUID)	0.000	0.000	0.000	0.000
AURAIYA (GAS)	0.353	0.340	0.000	0.000
AURAIYA (RLNG)	50.466	48.829	0.000	0.000
AURAIYA (LIQUID)	0.000	0.000	0.000	0.000
SINGRAULI	92.619	88.963	89.534	86.000
SINGRAULI_HYDRO	0.000	0.000	0.000	0.000
RIHAND -I	28.956	27.821	26.931	25.877
RIHAND -II	85.593	82.204	82.552	79.283
RIHAND -III	91.973	89.232	91.488	88.762
UNCHAHAR-I	16.198	15.678	11.857	11.476
UNCHAHAR-II	31.820	30.798	23.008	22.268
UNCHAHAR-III	19.487	18.861	14.333	13.872
UNCHAHAR-IV	0.000	0.000	0.000	0.000
DADRI (TH)	407.511	397.491	108.122	105.471
DADRI (TH) STAGE-II	511.400	498.760	203.924	198.940
TALCHER FOR AUX. OF BTPS	1.321	1.288	1.321	1.288
NAPP	32.737	31.684	32.737	31.684
RAPP 'B'	0.000	0.000	0.000	0.000
RAPP 'C'	35.810	34.212	35.810	34.212
NATHPA JHAKRI	22.618	21.892	22.618	21.892
DULASTI	14.211	13.824	14.211	13.824
TEHRI	15.240	14.750	15.240	14.750

NAME OF THE STATION	AVAILABILITY AT POWER PLANT	AVAILABILITY AT DELHI PERIPHERY	ALLOCATION MADE BY NRLDC AT POWER PLANT	ALLOCATION MADE BY NRLDC AT DELHI PERIPHERY
JHAJJAR	376.216	366.967	0.460	0.449
KHELGAON	29.355	28.787	24.381	23.909
KHELGAON-II	104.093	102.084	92.431	90.646
FARAKA	13.760	13.493	10.659	10.452
TALA	3.184	3.092	3.184	3.092
DVC	220.768	219.243	219.243	216.527
TUTICORIN - BRPL	12.775	12.660	12.660	12.506
MADHYA PRADESH	7.728	7.647	7.647	7.549
UTTAR PRADESH	0.000	0.000	0.000	0.000
WEST BENGAL	0.000	0.000	0.000	0.000
SCLTPS (UP)	0.000	0.000	0.000	0.000
TAMILNAIDU	7.694	7.625	7.625	7.532
SEIL PROJECT(ANDHRA PRADESH)	0.000	0.000	0.000	0.000
MEGHALAYA	2.600	2.597	2.597	2.565
ANDHRA	1.661	1.646	1.646	1.627
KARNATAKA	7.138	7.020	7.020	6.933
ESSAR_MAHAN (MP)	0.202	0.200	0.200	0.198
METHON POWER(NDPL)LT-06	168.564	167.402	167.402	165.350
DVC MEJIA (LT-08)(BYPL)	66.658	66.196	66.196	65.379
Acme_RUMS	9.532	9.437	9.437	9.320
Arinsun_RUMS	9.540	9.444	9.444	9.328
Mahindra_RUMS	7.845	7.766	7.766	7.670
URS	0.146	0.144	0.146	0.144
JAMMU & KASHMIR	5.976	5.887	5.887	5.814
HIMACHAL PRADESH	5.634	5.563	5.563	5.494
JHABUA (MP)	0.363	0.360	0.360	0.355
UTTRAKHAD	0.000	0.000	0.000	0.000
FSTPP-III(WEST BENGAL)	0.023	0.023	0.023	0.023
BGTPP (ASSAM)	0.236	0.234	0.234	0.231
HIMACHAL PRADESH LT-59 DVC	1.146	1.131	1.131	1.117
HARYANA (LT-05)	34.663	34.239	34.239	33.822
MP(SOLAR RUMS)	10.439	10.333	10.333	10.206
HP TPDDL (NANTI)	1.237	1.222	1.222	1.206
BIHAR	0.021	0.021	0.021	0.021
ODHISHA	0.076	0.075	0.075	0.074
ORISSA MT-20 JITPL -DVC	4.881	4.835	4.835	4.776
D.B. POWER (CHATTISHGARH)	0.142	0.140	0.140	0.138
JHARKHAND	0.277	0.275	0.275	0.272
RAJASTHAN(SOLAR) BRPL-LT36	3.303	3.209	3.209	3.170
RAJASTHAN(SOLAR) BYPL - LT-35	2.953	2.869	2.869	2.834
RAJASTHAN(SOLAR) TPDDL LT-31	3.145	3.056	3.056	3.019
TO JHARKHAND	0.000	0.000	0.000	0.000
TO ANDHRA	0.000	0.000	0.000	0.000
TO UTTAR PRADESH	0.000	0.000	0.000	0.000
TO WEST BENGAL	-7.506	-7.560	-7.560	-7.657
TO ASSAM	0.000	0.000	0.000	0.000
TO UTTRAKHAND	-41.351	-42.405	-42.405	-42.942
TO ODISHA	0.000	0.000	0.000	0.000
TO TELENGANA	0.000	0.000	0.000	0.000
TO GOA	0.000	0.000	0.000	0.000
TO CHATTISHGARH	0.000	0.000	0.000	0.000
TO DADAR & NAGAR HAVELI	0.000	0.000	0.000	0.000
BTPS TO MP	0.000	0.000	0.000	0.000
TO HIMACHAL PRADESH	-279.429	-286.529	-286.529	-290.156
TO GUJRAT	0.000	0.000	0.000	0.000
POWER EXCHANGE(IEX)	304.418	300.615	304.418	300.615
TO POWER EXCHANGE (IEX)	-66.941	-67.792	-66.941	-67.792
POWER EXCHANGE(PX)	0.000	0.000	0.000	0.000
TO POWER EXCHANGE (PX)	0.000	0.000	0.000	0.000
TO SHARE PROJECT (HARYANA)	-17.138	-17.353	-17.138	-17.353
TO SHARE PROJECT (PUNJAB)	-14.862	-15.048	-14.862	-15.048
TOTAL	2944.987	2859.045	1789.871	1734.185

C) AGENCY WISE BREAKUP OF ENERGY SCHEDULED DRAWL FROM THE GRID

NAME OF THE STATION	AVAILABILITY AT POWER PLANT	AVAILABILITY AT DELHI PERIPHERY	ALLOCATION MADE BY NRLDC AT POWER PLANT	ALLOCATION MADE BY NRLDC AT DELHI PERIPHERY
NTPC - NR	1407.586	1368.324	661.050	640.915
NTPC - ER	147.209	144.365	127.472	125.007
NHPC	112.615	109.584	112.599	109.568
NPC	68.547	65.896	68.547	65.896
SASAN	307.668	298.496	307.668	298.496
KOTESHWAR	8.229	7.964	8.229	7.964
NATHPA JHAKRI	22.618	21.892	22.618	21.892
TALCHER FOR AUX. OF BTPS	1.321	1.288	1.321	1.288
TEHRI	15.240	14.750	15.240	14.750
TALA	3.184	3.092	3.184	3.092
JHAJJAR	376.216	366.967	0.460	0.449
RAJASTHAN SOLAR(BRPL)T-36	3.303	3.209	3.209	3.170
RAJASTHAN SOLAR(BYPL)T-35	2.953	2.869	2.869	2.834
RAJASTHAN SOLAR(TPDDL)T-31	3.145	3.056	3.056	3.019
DVC	220.768	219.243	219.243	216.527
TUTICORIN BRPL	12.775	12.660	12.660	12.506
MADHYA PRADESH	7.728	7.647	7.647	7.549
UTTAR PRADESH	0.000	0.000	0.000	0.000
WEST BENGAL	0.000	0.000	0.000	0.000
SCLTPS (UP)	0.000	0.000	0.000	0.000
TAMILNAIDU	7.694	7.625	7.625	7.532
SEIL PROJECT(ANDHRA PRADESH)	0.000	0.000	0.000	0.000
MEGHALAYA	2.600	2.597	2.597	2.565
ANDHRA	1.661	1.646	1.646	1.627
KARNATAKA	7.138	7.020	7.020	6.933
ESSAR_MAHAN (MP)	0.202	0.200	0.200	0.198
METHON POWER (NDPL)-LT-06	168.564	167.402	167.402	165.350
DVC MEJIA (LT-08)(BYPL)	66.658	66.196	66.196	65.379
Acme_RUMS	9.532	9.437	9.437	9.320
Arinsun_RUMS	9.540	9.444	9.444	9.328
Mahindra_RUMS	7.845	7.766	7.766	7.670
URS	0.146	0.144	0.146	0.144
JAMMU & KASHMIR	5.976	5.887	5.887	5.814
HIMACHAL PRADESH	5.634	5.563	5.563	5.494
JHABUA (MP)	0.363	0.360	0.360	0.355
UTTRAKHAND	0.000	0.000	0.000	0.000
FSTPP-III(WEST BENGAL)	0.023	0.023	0.023	0.023
BGTPP (ASSAM)	0.236	0.234	0.234	0.231
HIMACHAL PRADESH LT-59 DVC	1.146	1.131	1.131	1.117
HARYANA (LT -05)	34.663	34.239	34.239	33.822
BIHAR	0.021	0.021	0.021	0.021
ODISHA	0.076	0.075	0.075	0.074
ORISSA MT-20 JITPL -DVC	4.881	4.835	4.835	4.776
D.B. POWER (CHATTISHGARH)	0.142	0.140	0.140	0.138
JHARKHAND	0.277	0.275	0.275	0.272
MP(SOLAR RUMS)	10.439	10.333	10.333	10.206
HP TPDDL	1.237	1.222	1.222	1.206
POWER EXCHANGE(IEX)	304.418	300.615	304.418	300.615
POWER EXCHANGE(PX)	0.000	0.000	0.000	0.000
TOTAL	3372.215	3295.732	2225.307	2175.133

D) AGENCY WISE BREAKUP OF ENERGY SCHEDULED BY NRLDC FOR EXPORT TO OTHER UTILITIES FROM DTL

NAME OF THE STATION	AVAILABILITY AT POWER PLANT	AVAILABILI TY AT PERIPHERY	ALLOCATION MADE BY NRLDC AT POWER PLANT	ALLOCATION MADE BY NRLDC AT POWER PERIPHERY
TO JHARKHAND	0.000	0.000	0.000	0.000
TO ANDHRA	0.000	0.000	0.000	0.000
TO UTTAR PRADESH	0.000	0.000	0.000	0.000
TO WEST BENGAL	-7.506	-7.560	-7.560	-7.657
TO UTTRAKHAND	-41.351	-42.405	-42.405	-42.942
TO ASSAM	0.000	0.000	0.000	0.000
TO ORIDSHA	0.000	0.000	0.000	0.000
TO TELENGANA	0.000	0.000	0.000	0.000
TO GOA	0.000	0.000	0.000	0.000
TO CHATTISHGARH	0.000	0.000	0.000	0.000
TO DADAR & NAGAR HAVELI	0.000	0.000	0.000	0.000
BTPS TO MP	0.000	0.000	0.000	0.000
TO HIMACHAL PRADESH	-279.429	-286.529	-286.529	-290.156
TO GUJRAT	0.000	0.000	0.000	0.000
TO POWER EXCHANGE (IEX)	-66.941	-67.792	-66.941	-67.792
TO POWER EXCHANGE (PX)	0.000	0.000	0.000	0.000
TO SHARE PROJECT (HARYANA)	-17.138	-17.353	-17.138	-17.353
TO SHARE PROJECT (PUNJAB)	-14.862	-15.048	-14.862	-15.048
TOTAL	-427.227	-436.687	-435.436	-440.949
TOTAL SCHEDULED DRAWAL FROM THE GRID	2944.987	2859.045	1789.871	1734.185

TOTAL CONSUMPTION INCLUDING AUX. OF GENERATING STNs. EXCLUDING BTPS		2168.368
NET CONSUMPTION		**2150.631**
AVAILABILITY WITHIN DELHI		425.920
ACTUAL DRAWAL FROM THE GRID		1724.711
OVER DRAWAL(+)/UNDER DRAWAL(-) FROM THE GRID ON THE BASIS OF SCHEDULED ALLOCATION MADE BY NRLDC TO DELHI AT PERIPHERY		-9.474
LOAD SHEDDING		0.440
UNRESTRICTED DEMAND (GROSS)		2168.808
UNRESTRICTED DEMAND (NET)		2151.071
MAX. NET CONSUMPTION		85.831 ON 31.12.2019
MAX. LOAD SHEDDING		173MW ON 30.12.2019 AT 12.15HRS.
PEAK LOAD	Peak Demand during the month	SHEDDING AT PEAK TIME
DAY PEAK	5245MW AT 10.45.48 HRS ON 31.12.2019	16 MW
EVENING PEAK	4337MW AT 18.30.00HRS ON 30.12.2019	0 MW
P.L.F. OF GENCO AND PRAGATI STNs.	RPH	0.00%
	GT	17.96%
	PRAGATI	50.61%
	RITHALA	0.00%
	BAWANA	26.55%
	Timarpur Okhla	117.13%
	EDWPCL	43.67%
	DMSWL	55.77%

9 SHEDDING DETAILS DURING THE MONTH OF DECEMBER 2019.

ALL FIGURES IN MUs

DATE	No. of Under Freq. Relay Operated	Shedding due to under frequency relay operation in MUs					Shedding due to Grid Restrictions (Over drawal / low freq.)				
		BSES		NDPL	NDMC	TOTAL	BSES		NDPL	NDMC	MES
		BYPL	BRPL				BYPL	BRPL			
1	2	3	4	5	6	7=3 to 6	8	9	10	11	12
01.Dec.19	0	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
02.Dec.19	0	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
03.Dec.19	0	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
04.Dec.19	0	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
05.Dec.19	0	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
06.Dec.19	0	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
07.Dec.19	0	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
08.Dec.19	0	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
09.Dec.19	0	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
10.Dec.19	0	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
11.Dec.19	0	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
12.Dec.19	0	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
13.Dec.19	0	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
14.Dec.19	0	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
15.Dec.19	0	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
16.Dec.19	0	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
17.Dec.19	0	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
18.Dec.19	0	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
19.Dec.19	0	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
20.Dec.19	0	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
21.Dec.19	0	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
22.Dec.19	0	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
23.Dec.19	0	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
24.Dec.19	0	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
25.Dec.19	0	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
26.Dec.19	0	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
27.Dec.19	0	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
28.Dec.19	0	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
29.Dec.19	0	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
30.Dec.19	0	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
31.Dec.19	0	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
TOTAL	**0.000**	**0.000**	**0.000**	**0.000**	**0.000**	**0.000**	**0.000**	**0.000**	**0.000**	**0.000**	**0.000**

ALL FIGURES IN MUs

Date	Shedding due to Transmission/Grid Constraints in Central Sector Stations / TTC / ATC VOILATION				DUE TO NEW GRID CODE REGULATION DEVIATOIN			Shedding due to Transmission/Grid Constraints in Central sector stations				Total	Total shedding due to grid restrictions
	BSES		NDPL	NDMC	BSES			BSES		TPDDL	NDMC		
	BYPL	BRPL			BYPL	BRPL	TPDDL	BYPL	BRPL				
	13	14	15	16	17	18	19	20	21	22	23	24=8 to 23	25=7+24
01.Dec.19	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	**0.000**
02.Dec.19	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	**0.000**
03.Dec.19	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	**0.000**
04.Dec.19	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	**0.000**
05.Dec.19	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	**0.000**
06.Dec.19	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	**0.000**
07.Dec.19	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	**0.000**
08.Dec.19	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	**0.000**
09.Dec.19	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	**0.000**
10.Dec.19	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	**0.000**
11.Dec.19	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	**0.000**
12.Dec.19	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	**0.000**
13.Dec.19	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	**0.000**
14.Dec.19	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	**0.000**
15.Dec.19	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	**0.000**
16.Dec.19	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	**0.000**
17.Dec.19	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	**0.000**
18.Dec.19	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	**0.000**
19.Dec.19	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	**0.000**
20.Dec.19	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	**0.000**
21.Dec.19	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	**0.000**
22.Dec.19	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	**0.000**
23.Dec.19	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	**0.000**
24.Dec.19	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	**0.000**
25.Dec.19	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	**0.000**
26.Dec.19	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	**0.000**
27.Dec.19	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	**0.000**
28.Dec.19	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	**0.000**
29.Dec.19	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	**0.000**
30.Dec.19	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	**0.000**
31.Dec.19	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	**0.000**
TOTAL	**0.000**	**0.000**	**0.000**	**0.000**	**0.000**	**0.000**	**0.000**	**0.000**	**0.000**	**0.000**	**0.000**	**0.000**	**0.000**

ALL FIGURES IN MUs

Date	DUE TO T&D CONSTRAINTS IN DELHI SYSTEM								
	DTL					DISCOMS			
	BSES		NDPL	NDMC	**MES**	BSES		NDPL	NDMC
	BYPL	BRPL				BYPL	BRPL		
	26	27	28	29	**30**	31	32	33	34
01.Dec.19	0.000	0.000	0.001	0.000	0.000	0.000	0.000	0.000	0.000
02.Dec.19	0.000	0.000	0.000	0.000	0.000	0.000	0.001	0.006	0.000
03.Dec.19	0.000	0.000	0.000	0.000	0.000	0.000	0.024	0.000	0.000
04.Dec.19	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
05.Dec.19	0.008	0.000	0.000	0.000	0.000	0.000	0.004	0.000	0.000
06.Dec.19	0.000	0.000	0.000	0.000	0.000	0.000	0.0020	0.000	0.000
07.Dec.19	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
08.Dec.19	0.000	0.000	0.000	0.000	0.000	0.000	0.005	0.000	0.000
09.Dec.19	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.009	0.000
10.Dec.19	0.000	0.000	0.004	0.000	0.000	0.000	0.0020	0.0000	0.000
11.Dec.19	0.006	0.000	0.000	0.000	0.000	0.000	0.006	0.001	0.000
12.Dec.19	0.003	0.000	0.004	0.000	0.000	0.000	0.037	0.001	0.000
13.Dec.19	0.000	0.000	0.000	0.000	0.000	0.000	0.012	0.001	0.000
14.Dec.19	0.000	0.001	0.000	0.000	0.000	0.000	0.000	0.000	0.000
15.Dec.19	0.000	0.000	0.000	0.000	0.000	0.000	0.002	0.000	0.000
16.Dec.19	0.005	0.000	0.000	0.000	0.000	0.000	0.000	0.001	0.000
17.Dec.19	0.000	0.000	0.000	0.000	0.000	0.000	0.002	0.000	0.000
18.Dec.19	0.003	0.000	0.000	0.000	0.000	0.000	0.001	0.003	0.000
19.Dec.19	0.001	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
20.Dec.19	0.000	0.011	0.000	0.000	0.000	0.000	0.000	0.000	0.000
21.Dec.19	0.000	0.000	0.000	0.000	0.000	0.000	0.001	0.003	0.000
22.Dec.19	0.000	0.000	0.000	0.000	0.000	0.000	0.001	0.0020	0.000
23.Dec.19	0.0000	0.000	0.000	0.000	0.000	0.000	0.031	0.0000	0.000
24.Dec.19	0.000	0.000	0.000	0.000	0.000	0.000	0.012	0.000	0.000
25.Dec.19	0.000	0.000	0.000	0.000	0.000	0.000	0.006	0.003	0.000
26.Dec.19	0.000	0.000	0.000	0.000	0.000	0.000	0.022	0.0000	0.000
27.Dec.19	0.039	0.000	0.000	0.000	0.000	0.000	0.009	0.000	0.000
28.Dec.19	0.000	0.000	0.000	0.000	0.000	0.016	0.012	0.011	0.000
29.Dec.19	0.000	0.017	0.000	0.000	0.000	0.000	0.021	0.000	0.000
30.Dec.19	0.000	0.025	0.0000	0.000	0.000	0.000	0.005	0.000	0.000
31.Dec.19	0.000	0.000	0.000	0.000	0.000	0.000	0.030	0.005	0.000
TOTAL	**0.065**	**0.054**	**0.009**	**0.000**	**0.000**	**0.016**	**0.248**	**0.046**	**0.000**

ALL FIGURES IN MUs

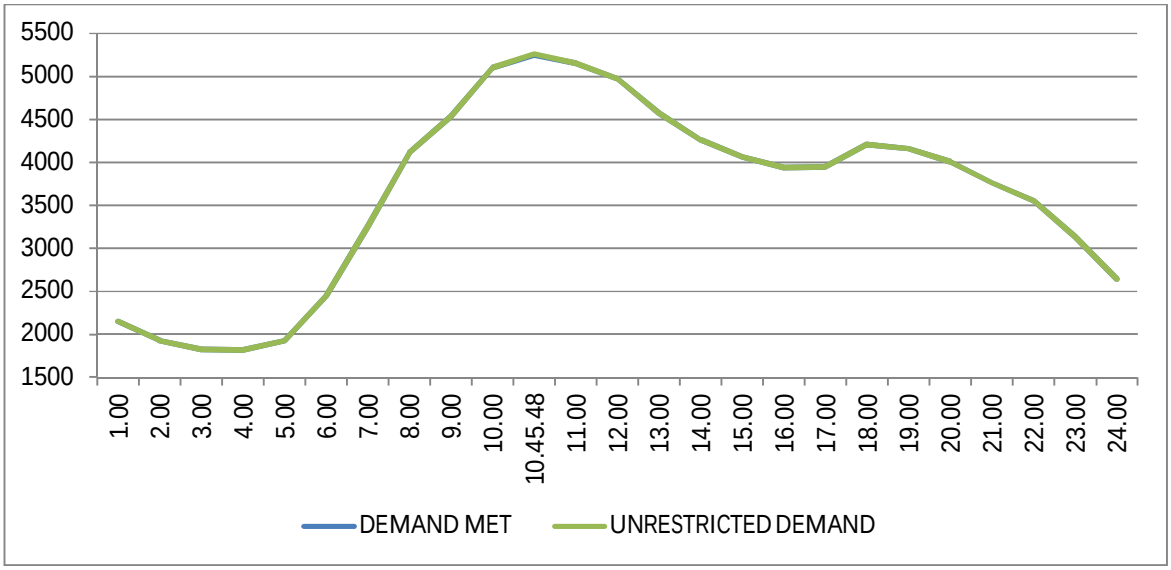
DATE	OTHER AGENCIES LIKE GENCO, BBMB, BTPS ETC.				THEFT PRONE SHEDDING			TOTAL SHEDDING DUE TO T&D CONSTS. & THEFT PRONE	GRAND TOTAL
	BSES		NDPL	NDMC	BSES		NDPL		
	BYPL	BRPL			BYPL	BRPL			
1	35	36	37	38	39	40	41	42= 26 to 41	43 = 25 + 42
01.Dec.19	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.001	0.001
02.Dec.19	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.007	0.007
03.Dec.19	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.024	0.024
04.Dec.19	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
05.Dec.19	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.012	0.012
06.Dec.19	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.002	0.002
07.Dec.19	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
08.Dec.19	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.005	0.005
09.Dec.19	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.009	0.009
10.Dec.19	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.006	0.006
11.Dec.19	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.013	0.013
12.Dec.19	0.000	0.002	0.000	0.000	0.000	0.000	0.000	0.047	0.047
13.Dec.19	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.013	0.013
14.Dec.19	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.001	0.001
15.Dec.19	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.002	0.002
16.Dec.19	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.006	0.006
17.Dec.19	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.002	0.002
18.Dec.19	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.007	0.007
19.Dec.19	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.001	0.001
20.Dec.19	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.011	0.011
21.Dec.19	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.004	0.004
22.Dec.19	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.003	0.003
23.Dec.19	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.031	0.031
24.Dec.19	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.012	0.012
25.Dec.19	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.009	0.009
26.Dec.19	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.022	0.022
27.Dec.19	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.048	0.048
28.Dec.19	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.039	0.039
29.Dec.19	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.038	0.038
30.Dec.19	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.030	0.030
31.Dec.19	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.035	0.035
TOTAL	0.000	0.002	0.000	0.000	0.000	0.000	0.000	0.440	0.440

DATE	(NET CONS.)	MAXI. DEMAND MET DURING THE DAY	TIME OF OCCUR-RENCE OF MAX DEMAND	SHEDDING AT THIS TIME	UN-REST-RICTED DEMAND	MAXIMUM UN-REST-RICTED DEMAND DURING THE DAY	TIME OF MAX. UN-REST. DEMAND	DEMAND AT THAT TIME	SHEDDING AT THAT TIME
	In Mus.	IN MW	IN HRS.	IN MW	IN MW	IN MW	HRS.	IN MW	IN MW
1	32	33	34	35	36=33+35	37=39+40	38	39	40
01.Dec.19	60.369	3400	3:47:58	0	3400	3400	3:47:58	3400	0
02.Dec.19	60.007	3495	10:00:59	0	3495	3495	10:00:59	3495	0
03.Dec.19	63.333	3586	10:03:42	0	3586	3586	10:03:42	3586	0
04.Dec.19	62.459	3639	10:30:29	0	3639	3639	10:30:29	3639	0
05.Dec.19	61.820	3574	10:43:59	0	3574	3574	10:43:59	3574	0
06.Dec.19	66.497	3793	10:27:44	0	3793	3793	10:27:44	3793	0
07.Dec.19	61.934	3546	10:29:13	0	3546	3546	10:29:13	3546	0
08.Dec.19	58.742	3595	10:53:46	0	3595	3595	10:53:46	3595	0
09.Dec.19	63.202	3600	11:00:50	0	3600	3600	11:00:50	3600	0
10.Dec.19	63.832	3665	9:38:52	0	3665	3665	9:38:52	3665	0
11.Dec.19	65.483	3851	10:15:29	0	3851	3851	10:15:29	3851	0
12.Dec.19	65.015	3736	9:57:12	0	3736	3736	9:57:12	3736	0
13.Dec.19	63.730	3975	10:24:07	0	3975	3975	10:24:07	3975	0
14.Dec.19	61.346	3868	10:02:29	0	3868	3868	10:02:29	3868	0
15.Dec.19	61.367	3874	10:51:41	0	3874	3874	10:51:41	3874	0
16.Dec.19	68.061	3938	10:15:41	0	3938	3938	10:15:41	3938	0
17.Dec.19	70.530	4079	10:00:45	0	4079	4079	10:00:45	4079	0
18.Dec.19	72.419	4312	10:23:39	0	4312	4312	10:23:39	4312	0
19.Dec.19	72.749	4256	10:50:53	0	4256	4256	10:50:53	4256	0
20.Dec.19	74.684	4628	10:48:25	0	4628	4628	10:48:25	4628	0
21.Dec.19	70.555	4202	18:48:25	0	4202	4202	18:48:25	4202	0
22.Dec.19	68.967	4346	11:00:48	0	4346	4346	11:00:48	4346	0
23.Dec.19	75.004	4488	11:15:02	0	4488	4488	11:15:02	4488	0
24.Dec.19	76.536	4636	10:19:56	0	4636	4636	10:19:56	4636	0
25.Dec.19	76.500	4770	10:53:52	0	4770	4770	10:53:52	4770	0
26.Dec.19	79.039	4920	11:35:00	0	4920	4920	11:35:00	4920	0
27.Dec.19	81.731	4976	10:11:08	0	4976	4976	10:11:08	4976	0
28.Dec.19	77.775	4709	11:01:21	9	4718	4718	11:01:21	4709	9
29.Dec.19	77.019	4832	11:30:40	0	4832	4832	11:30:40	4832	0
30.Dec.19	84.499	5060	10:43:00	0	5060	5060	10:43:00	5060	0
31.Dec.19	85.866	5245	10:45:48	16	5261	5261	10:45:48	5245	16
TOTAL	2151.070	5245 **31.12.19**	10:45:48	0	5261 **31.12.19**	5261	10:45:48	5245	0

10 LOAD PATTERN OF DELHI ON THE DAY OF PEAK DEMAND MET DURING DECEMBER 2019 ON 31.12.2019- 5245MW AT 10.45.48HRS.

All figures in MW

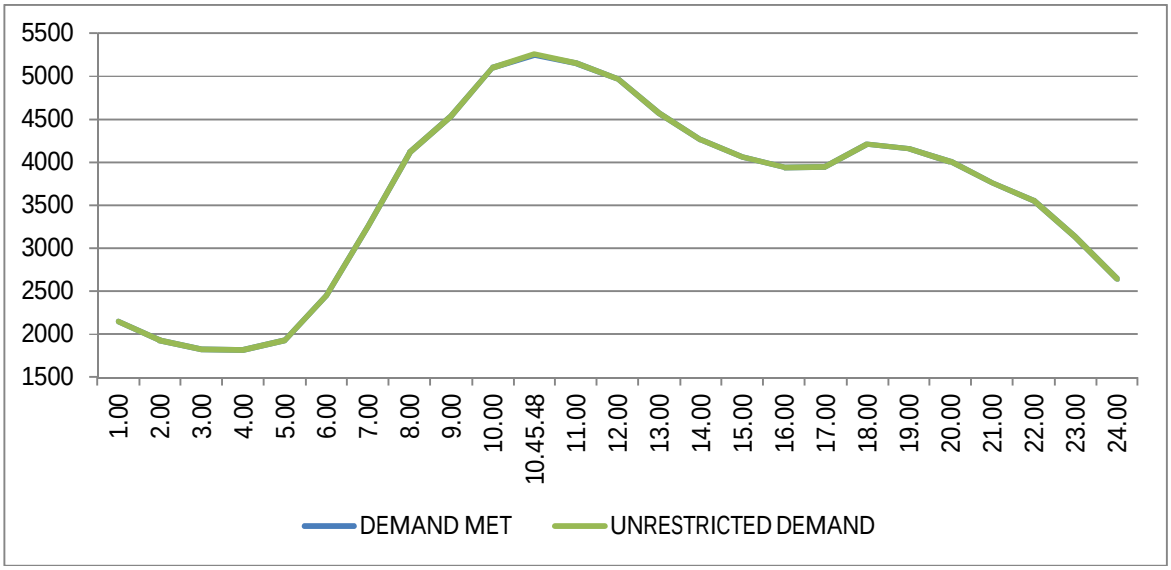
Hrs.	Demand	Load Shedding	Un-Restricted Demand
1.00	2149	0	2149
2.00	1929	0	1929
3.00	1823	0	1823
4.00	1818	0	1818
5.00	1926	0	1926
6.00	2445	0	2445
7.00	3255	0	3255
8.00	4115	0	4115
9.00	4536	0	4536
10.00	5100	0	5100
10.45.48	5245	16	5261
11.00	5151	0	5151
12.00	4967	0	4967
13.00	4568	0	4568
14.00	4259	0	4259
15.00	4066	0	4066
16.00	3939	0	3939
17.00	3949	2	3951
18.00	4210	0	4210
19.00	4158	0	4158
20.00	4008	0	4008
21.00	3758	0	3758
22.00	3557	0	3557
23.00	3133	0	3133
24.00	2642	0	2642
Total (IN MUS)	**85.831**	**0.035**	**85.866**



11 LOAD PATTERN OF DELHI ON THE DAY OF MAXIMUM UN-RESTRICTED DEMAND DURING DECEMBER 2019 ON 31.12.2019- 5261MW AT 10.45.48HRS.

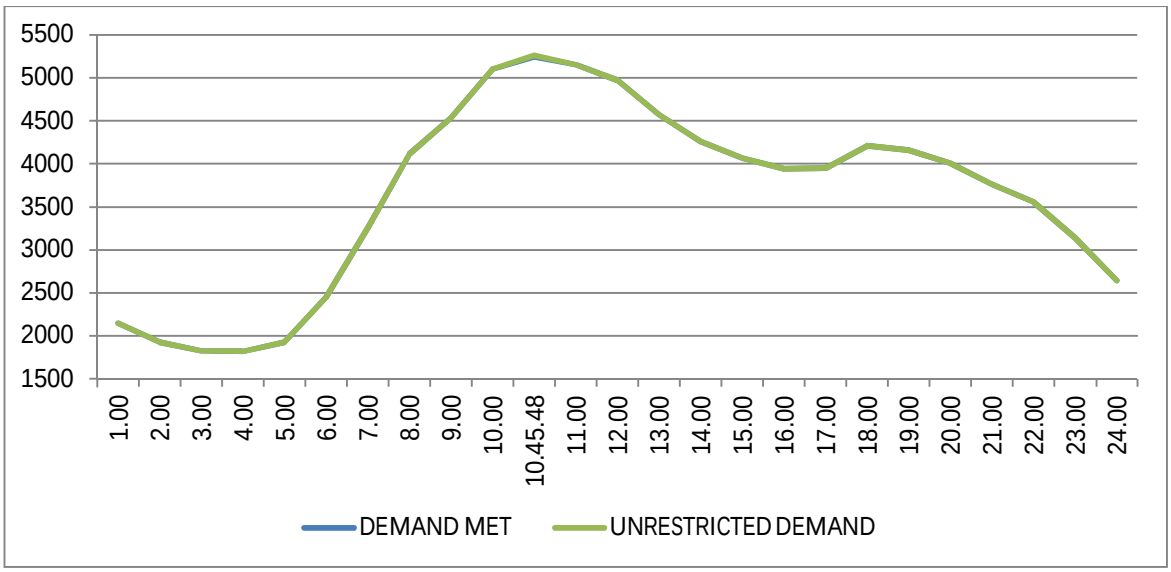
All figures in MW

Hrs.	Demand	Load Shedding	Un-Restricted Demand
1.00	2149	0	2149
2.00	1929	0	1929
3.00	1823	0	1823
4.00	1818	0	1818
5.00	1926	0	1926
6.00	2445	0	2445
7.00	3255	0	3255
8.00	4115	0	4115
9.00	4536	0	4536
10.00	5100	0	5100
10.45.48	5245	16	5261
11.00	5151	0	5151
12.00	4967	0	4967
13.00	4568	0	4568
14.00	4259	0	4259
15.00	4066	0	4066
16.00	3939	0	3939
17.00	3949	2	3951
18.00	4210	0	4210
19.00	4158	0	4158
20.00	4008	0	4008
21.00	3758	0	3758
22.00	3557	0	3557
23.00	3133	0	3133
24.00	2642	0	2642
Total (IN MUS)	**85.831**	**0.035**	**85.866**



12 LOAD PATTERN OF DELHI ON THE DAY OF MAXIMUM ENERGY CONSUMED DURING DECEMBER 2019 – 31.12.2019 – 85.866Mus All figures in MW

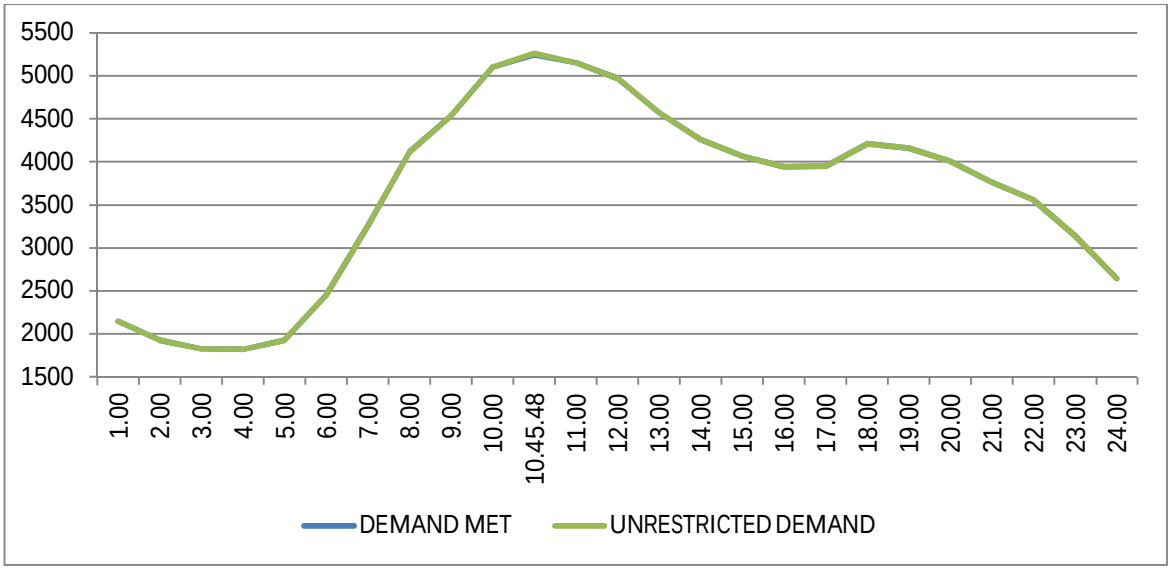
Hrs.	Demand	Load Shedding	Un-Restricted Demand
1.00	2149	0	2149
2.00	1929	0	1929
3.00	1823	0	1823
4.00	1818	0	1818
5.00	1926	0	1926
6.00	2445	0	2445
7.00	3255	0	3255
8.00	4115	0	4115
9.00	4536	0	4536
10.00	5100	0	5100
10.45.48	5245	16	5261
11.00	5151	0	5151
12.00	4967	0	4967
13.00	4568	0	4568
14.00	4259	0	4259
15.00	4066	0	4066
16.00	3939	0	3939
17.00	3949	2	3951
18.00	4210	0	4210
19.00	4158	0	4158
20.00	4008	0	4008
21.00	3758	0	3758
22.00	3557	0	3557
23.00	3133	0	3133
24.00	2642	0	2642
Total (IN MUS)	**85.831**	**0.035**	**85.866**



13 LOAD PATTERN OF DELHI ON THE DAY OF MAXIMUM UNRESTRICTED ENERGY DEMAND DURING DECEMBER 2019 – 31.12.2019 – 85.901Mus

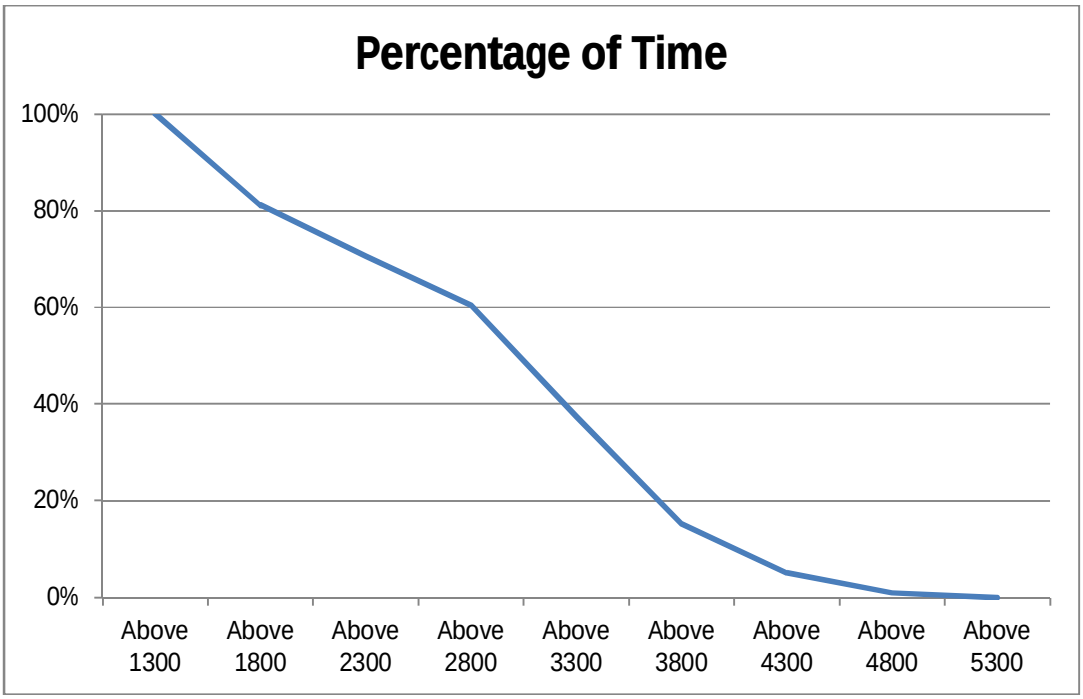
All figures in MW

Hrs.	Demand	Load Shedding	Un-Restricted Demand
1.00	2149	0	2149
2.00	1929	0	1929
3.00	1823	0	1823
4.00	1818	0	1818
5.00	1926	0	1926
6.00	2445	0	2445
7.00	3255	0	3255
8.00	4115	0	4115
9.00	4536	0	4536
10.00	5100	0	5100
10.45.48	5245	16	5261
11.00	5151	0	5151
12.00	4967	0	4967
13.00	4568	0	4568
14.00	4259	0	4259
15.00	4066	0	4066
16.00	3939	0	3939
17.00	3949	2	3951
18.00	4210	0	4210
19.00	4158	0	4158
20.00	4008	0	4008
21.00	3758	0	3758
22.00	3557	0	3557
23.00	3133	0	3133
24.00	2642	0	2642
Total (IN MUS)	**85.831**	**0.035**	**85.866**



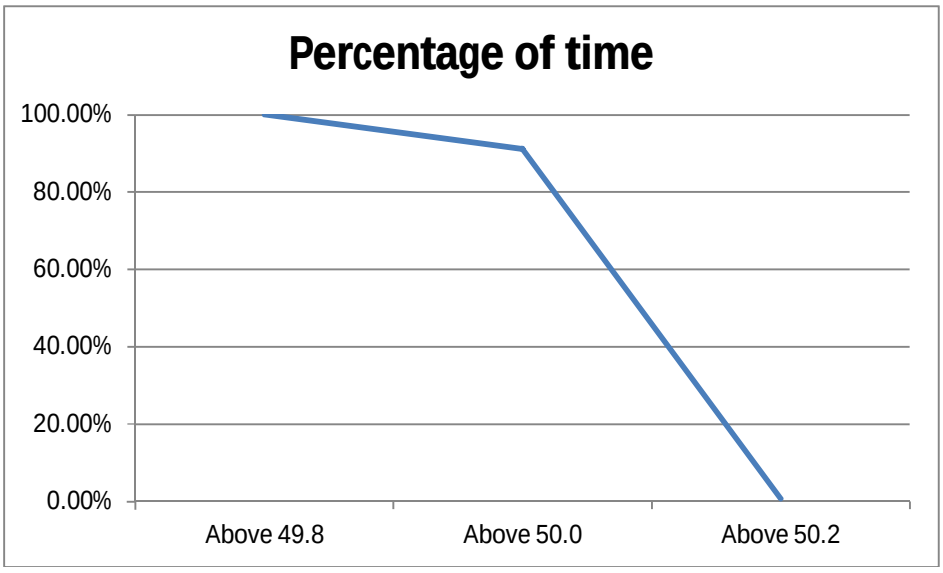
14 LOAD DURATION CURVE FOR DECEMBER 2019

Load in MW	Percentage of Time
Above 1300	100%
Above 1800	81.11%
Above 2300	70.53%
Above 2800	60.38%
Above 3300	37.33%
Above 3800	15.26%
Above 4300	5.04%
Above 4800	0.94%
Above 5300	0.00%



15 FREQUENCY ANALYSIS FOR THE MONTH OF DECEMBER 2019

Frequency Range in Hz.	Percentage of time
Above 49.8	100.00%
Above 50.0	91.19%
Above 50.2	0.63%



16 VOLTAGE PROFILE OF 220 KV SUB-STATIONS IN DELHI DURING DECEMBER 2019

All figures in kV

Date	NARELA		GAZIPUR	
	Max	Min	Max	Min
01.Dec.19	235.75	223.37	241.68	230.46
02.Dec.19	236.91	224.27	242.46	229.43
03.Dec.19	235.23	0	240.78	227.24
04.Dec.19	235.62	219.76	242.07	225.05
05.Dec.19	235.75	220.53	241.43	226.34
06.Dec.19	234.98	219.63	241.55	224.92
07.Dec.19	234.98	222.47	241.04	227.88
08.Dec.19	234.59	219.5	240.91	225.43
09.Dec.19	234.98	218.98	241.55	224.14
10.Dec.19	233.3	218.86	239.49	224.01
11.Dec.19	233.69	0	239.75	226.08
12.Dec.19	236.27	0	242.33	224.14
13.Dec.19	236.01	235.11	242.72	227.88
14.Dec.19	235.62	235.62	241.81	226.72
15.Dec.19	235.62	235.62	241.04	228.27
16.Dec.19	235.62	225.05	241.68	227.37
17.Dec.19	235.62	219.24	239.62	223.11
18.Dec.19	235.75	216.66	240.39	221.82
19.Dec.19	235.36	220.92	241.43	226.21
20.Dec.19	235.36	220.79	242.46	226.34
21.Dec.19	235.62	221.56	242.07	228.66
22.Dec.19	236.01	220.92	242.33	228.14
23.Dec.19	235.75	219.76	242.84	224.66
24.Dec.19	235.23	221.05	241.43	226.34
25.Dec.19	235.11	218.98	240.91	223.76
26.Dec.19	235.75	214.99	242.07	221.56
27.Dec.19	235.75	217.95	241.81	0
28.Dec.19	236.27	218.6	242.84	224.27
29.Dec.19	227.37	227.37	241.68	226.08
30.Dec.19	233.69	219.89	243.49	0
31.Dec.19	235.62	219.5	241.68	224.01

17 VOLTAGE PROFILE OF 400 KV SUB-STATIONS IN DELHI DURING DECEMBER 2019

All figures in kV

Date	400kV Bamnauli Grid Sub-Station				
	Max KV	Max Time	Min KV	Min Time	Average KV
01.Dec.19	419.5	03:59:53	401.44	9:47:34	412.94
02.Dec.19	420.9	03:15:46	400.97	7:48:37	411.14
03.Dec.19	418.56	03:59:50	396.75	9:45:50	410.67
04.Dec.19	420.67	03:59:43	393.23	9:10:43	410.17
05.Dec.19	420.9	23:54:58	0	9:44:27	238.22
06.Dec.19	423.01	02:35:49	390.42	9:19:00	411.24
07.Dec.19	418.09	03:35:52	397.22	9:17:23	409.51
08.Dec.19	417.86	04:01:05	392.3	9:19:16	409.62
09.Dec.19	418.56	02:45:48	391.36	9:56:49	407.74
10.Dec.19	416.21	20:59:05	390.89	8:32:12	405.75
11.Dec.19	418.09	04:00:34	396.75	9:22:35	409.52
12.Dec.19	422.55	21:43:30	392.76	9:22:38	411.39
13.Dec.19	419.5	02:29:50	395.81	7:13:21	409.73
14.Dec.19	420.67	04:00:43	395.11	10:37:24	410.63
15.Dec.19	420.9	21:50:26	400.27	9:37:57	413.18
16.Dec.19	422.08	00:54:29	399.1	6:41:10	412.11
17.Dec.19	419.73	23:10:54	393.7	9:17:04	410.34
18.Dec.19	421.37	02:00:05	390.42	9:23:26	410.6
19.Dec.19	420.9	04:00:38	395.11	9:08:38	410.23
20.Dec.19	420.2	01:59:50	392.06	9:11:11	409.7
21.Dec.19	420.43	01:55:53	396.05	10:23:34	410.66
22.Dec.19	420.43	23:59:29	394.64	9:20:47	410.43
23.Dec.19	420.2	00:00:00	391.12	9:12:10	409.46
24.Dec.19	419.73	01:02:41	395.81	9:23:32	409.5
25.Dec.19	419.03	02:01:14	390.19	10:34:15	408.3
26.Dec.19	420.43	01:01:17	384.09	11:12:28	406.16
27.Dec.19	419.26	03:00:40	386.9	10:53:31	407.4
28.Dec.19	419.03	03:30:03	388.54	8:50:33	407.98
29.Dec.19	419.5	00:06:15	393.47	9:18:42	408.17
30.Dec.19	419.73	00:01:18	391.12	11:52:00	408.58
31.Dec.19	420.2	03:47:01	389.72	8:50:41	408.4

All figures in kV

Date	400kV Bawana Grid Sub-Station				
	Max KV	Max Time	Min KV	Min Time	Average KV
01.Dec.19	431.22	15:04:36	415.04	9:48:12	425.99
02.Dec.19	433.57	3:39:46	415.98	8:36:10	425.56
03.Dec.19	432.39	4:00:55	413.4	9:44:09	425.73
04.Dec.19	434.97	4:00:13	408.94	9:09:37	425.05
05.Dec.19	433.1	4:00:23	411.99	9:52:46	424.96
06.Dec.19	435.44	2:29:59	408.94	9:19:24	425.16
07.Dec.19	432.39	3:35:38	414.81	9:18:12	424.81
08.Dec.19	431.46	4:02:17	409.18	9:45:21	424.45
09.Dec.19	432.63	1:38:42	407.54	9:57:00	422.12
10.Dec.19	428.88	3:59:54	407.54	9:20:21	419.17
11.Dec.19	430.28	4:00:33	412.23	12:07:29	423.11
12.Dec.19	436.61	21:44:04	408.01	9:31:25	425.13
13.Dec.19	435.44	2:16:58	411.29	9:32:33	424.69
14.Dec.19	433.33	4:00:58	409.18	10:37:33	424.28
15.Dec.19	434.27	23:59:51	413.4	9:35:00	426.19
16.Dec.19	435.68	0:53:52	414.34	9:18:48	424.85
17.Dec.19	433.57	4:00:23	408.71	10:20:09	423.75
18.Dec.19	433.57	21:00:03	406.13	9:23:25	424.09
19.Dec.19	434.27	4:00:25	411.29	9:08:53	424.32
20.Dec.19	434.27	2:00:06	410.12	9:11:11	423.43
21.Dec.19	433.1	1:55:44	411.29	9:57:49	424.6
22.Dec.19	433.1	2:32:52	411.06	10:20:18	424.77
23.Dec.19	433.1	0:00:09	408.48	10:10:36	423.18
24.Dec.19	433.33	21:25:33	411.29	9:25:44	423.48
25.Dec.19	432.39	1:59:28	407.54	10:33:15	422.7
26.Dec.19	433.8	1:01:24	399.1	11:06:42	419.56
27.Dec.19	432.39	3:00:41	402.85	10:51:26	421.26
28.Dec.19	437.32	3:30:23	404.25	9:13:53	423.31
29.Dec.19	432.63	0:06:05	407.54	10:54:23	421.56
30.Dec.19	433.1	0:01:23	408.71	11:54:32	423.62
31.Dec.19	433.33	3:48:25	407.3	11:16:59	422.31

20 DETAILS OF BREAK-DOWNS DURING THE MONTH OF DECEMBER 2019

SL NO	OCCURRENCE OF BREAK-DOWN		DETAILS OF THE BREAKDOWN	TIME OF RESTORATION		REMARKS
	DATE	TIME		DATE	TIME	
1	3.12.19	13:46	ELECTRIC LANE 220/33kV 100MVA Tx-II	5.12.19	18:00	O/C
2	3.12.19	13:46	ELECTRIC LANE 220/33kV 100MVA Tx-I	3.12.19	16:25	DIFFERENTIAL.
3	4.12.19	19:50	220KV PEERAGARHI-WAZIRPUR CKT-II	5.12.19	17:16	AT WAZUROR : SMOKE IN TRIPPING COIL
4	5.12.19	08:07	GAZIPUR 220/66kV 100MVA Tx-II	5.12.19	08:32	I/C-II tripped on E/F, 86
5	5.12.19	08:07	GAZIPUR 220/66kV 160MVA Tx-I	5.12.19	08:32	I/C-III tripped on O/C, E/F, R Phase.
6	6.12.19	14:20	ROHINI 220/66kV 100MVA Tx-II	6.12.19	14:50	86
7	7.12.19	12:15	220kV NARELA - MANDOLA CKT-II	7.12.19	17:35	AT NARELA: DIST PROT, ZONE-IV, ABC PHASE.
8	8.12.19	14:38	220kV PRAGATI - SARITA VIHAR CKT - I	8.12.19	19:09	AT SARITA VIHAR : 86ABC, DIST PROT, ZONE-I, DIST 2.404KM AT PRAGATI : DIST PROT, ZONE-II, DIST 10.48KM.
9	9.12.19	10:54	GOPALPUR 33/11kV, 16MVA Tx-II	9.12.19	16:06	DIFFERENTIAL.
10	11.12.19	08:10	220kV PRAGATI - SARITA VIHAR CKT - I	11.12.19	14:25	AT SARITA VIHAR : DIST PROT, ZONE-I, DIST 2.952KM, O/C, E/F. AT PRAGATI : DIST PROT, ZONE-II, DIST 12.11KM.
11	12.12.19	20:22	220kV MUNDKA-NAJAFGARH CKT	13.12.19	09:28	AT MUNDKA : DIST PROT, ZONE-I.
12	12.12.19	21:22	OKHLA 220/33kV 100MVA Tx-IV	13.12.19	04:10	86
13	12.12.19	21:22	GAZIPUR 220/66kV 160MVA Tx-I	13.12.19	04:10	O/C
14	12.12.19	21:44	400kV Bamnauli-Jhatikara Ckt-I	12.12.19	23:16	AT BAMNAULI : 186
15	13.12.19	07:16	220KV GAZIPUR - MAHARANIBAGH CKT. -II	13.12.19	08:55	AT GAZIPUR : DIST PROT, ZONE-I, DIFFERENTIAL. AT MAHARANI BAGH : DIFFERENTIAL, RY PHASE, 86.
16	13.12.19	08:25	PARKSTREET 66/33kV, 30MVA Tx-II			DIFFERENTIAL.
17	13.12.19	10:25	OKHLA 220/33kV 100MVA Tx-IV	13.12.19	15:25	DIFFERENTIAL.
18	13.12.19	16:30	OKHLA 220/33kV 100MVA Tx-IV	18.12.19	13:12	DIFFERENTIAL, 86.
19	14.12.19	16:25	OKHLA 220/33kV 100MVA Tx-III	14.12.19	16:42	86
20	16.12.19	00:48	400kV Bawana-Mundka Ckt-I	16.12.19	07:50	AT BAWANA : OVER VOLTAGE.
21	16.12.19	03:50	BAWANA 400/220kV 315MVA ICT-II	18.12.19	20:00	186A&B.
22	17.12.19	03:51	KANJHAWALA 220/66kV 100MVA Tx-I	17.12.19	06:25	OVER FLUX.
23	17.12.19	23:55	NARELA 66/11kV, 20MVA Tx-I	18.12.19	11:15	OVER FLUX.
24	17.12.19	23:55	NARELA 66/11kV, 20MVA Tx-I	18.12.19	11:15	OVER FLUX.
25	18.12.19	01:08	KANJHAWALA 220/66kV 100MVA Tx-I	18.12.19	07:26	OVERFLUX
26	18.12.19	03:25	WAZIRABAD 66/11kV, 20MVA Tx-IV	18.12.19	10:33	186A.
27	18.12.19	13:35	INDRAPRASTHA POWER 220/33kV 100MVA Tx-II	18.12.19	13:45	MONKEY ELECTROCUTION.
28	19.12.19	04:00	220kV OKHLA - BTPS CKT. - II	19.12.19	00:00	AT BTPS : GEN TRIP.
29	20.12.19	12:45	MEHRAULI 220/66kV 160MVA Tx-I	20.12.19	13:10	E/F.
30	20.12.19	17:08	OKHLA 220/33kV 100MVA Tx-III	20.12.19	18:07	86
31	20.12.19	17:08	OKHLA 220/33kV 100MVA Tx-IV	20.12.19	17:25	O/C
32	21.12.19	11:35	PAPPANKALAN-II 220/66kV 160MVA Tx-III	21.12.19	17:55	BUZHHOLZ RELAY.
33	22.12.19	04:03	220 KV PATPARGANJ - I.P. CKT-I	22.12.19	11:08	AT PATPARGANJ : DIST PROT, ZONE-I, DIST 516MTS. AT I.P. : DIST PROT, ZONE-I, 86.
34	23.12.19	02:01	220kV OKHLA - BTPS CKT. - II	23.12.19	06:58	AT BTPS : 86.
35	23.12.19	11:57	KASHMIRI GATE 220/33kV 100MVA Tx-II	23.12.19	19:38	DIFFERENTIAL.

SL NO	OCCURRENCE OF BREAK-DOWN		DETAILS OF THE BREAKDOWN	TIME OF RESTORATION		REMARKS
	DATE	TIME		DATE	TIME	
36	27.12.19	13:04	220KV GAZIPUR - MAHARANIBAGH CKT. -I	27.12.19	15:04	At Maharani Bagh:E/F, Y& B Phase At Gazipur: Ckt did not trip
37	28.12.19	00:24	400kV Bawana-Mundka Ckt-I	28.12.19	18:58	AT MUNDKA : 86.
38	28.12.19	00:24	400kV Bawana-Mundka Ckt-II	28.12.19	18:58	AT MUNDKA : 86.
39	28.12.19	04:40	SUBZI MANDI 33/11kV, 16MVA Tx-II	28.12.19	11:22	86
40	28.12.19	11:47	220KV PEERAGARHI-WAZIRPUR CKT-II	28.12.19	15:15	AT PEERAGARHI : E/F.
41	29.12.19	00:52	220kV GAZIPUR- PATPARGANJ CKT			AT GAZIPUR : DIFFERENTIAL.
42	29.12.19	18:20	MEHRAULI 220/66kV 100MVA Tx-I	29.12.19	18:30	O/C
43	30.12.19	03:25	220kV OKHLA - BTPS CKT. - II	30.12.19	13:12	AT BTPS : GEN TRIP.
44	30.12.19	05:22	220 KV PATPARGANJ - I.P. CKT-II	30.12.19	15:50	At Patparganj : Dist. Protection, Zone-I, R phase At I.P : Dist. Protection, R Phase,86.186.
45	30.12.19	05:40	220 KV PATPARGANJ - I.P. CKT-I	30.12.19	15:50	At Patparganj : Dist. Protection, Zone-I, B,Y phase, Dist 511mts. At I.P: Dist. Protection, Y phase,86.186.
46	30.12.19	06:15	220kV MAHARANI BAGH - SARITA VIHAR CKT	30.12.19	09:25	AT SARITA VIHAR : DIST PROT, ZONE-I, DIST 2.626KM. AT MHARANI BAGH : GEN TRIP, DIST PROT, ZONE-I.
47	30.12.19	12:15	220KV GAZIPUR - MAHARANIBAGH CKT. -II	30.12.19	12:33	At Maharani Bagh: RYB Phase, 86 A & B. At Gazipur: Ckt did not trip 12.15
48	30.12.19	12:15	220KV GAZIPUR - MAHARANIBAGH CKT. -I	30.12.19	12:28	At Maharani Bagh: RYB Phase, 86 A & B. At Gazipur: Dist prot, Differential trip, Zone-I, 86, RYB Phase.
49	31.12.19	03:57	KANJHAWALA 220/66kV 100MVA Tx-I	31.12.19	06:15	OVER FLUX.
50	31.12.19	17:00	SUBZI MANDI 33/11kV, 16MVA Tx-II	31.12.19	18:45	86

20 DETAILS OF UNDER FREQUENCY RELAY OPERATIONS IN DELHI POWER SYSTEM DURING THE MONTH OF DECEMBER 2019

DATE	S. N.	TIME		Name of Grid	NAME OF AFFECTED FEEDERS	MODE	LOAD RELIEF IN MW
		OUT	IN				
				NIL			