



POWER SYSTEM OPERATION CORPORATION LIMITED
NORTHERN REGIONAL LOAD DESPATCH CENTRE
DAILY OPERATION REPORT OF NORTHERN REGION

Power Supply Position in Northern Region For 01-May-2019

Date of Reporting:02-May-2019

1. Regional Availability/Demand:

Evening Peak (20:00) MW				Off-Peak (03:00) MW				Day Energy(Net MU)	
Demand Met	Shortage(-)/Surplus(+)	Requirement	Freq (Hz)	Demand Met	Shortage(-)/Surplus ..	Requirement	Freq (Hz)	Demand Met	Shortage
51,475	522	51,997	50.04	49,030	270	49,300	50.11	1,159	10.36

2(A)State's Load Deails (At State Periphery) in MU:

State	State's Control Area Generation (Net MU)							Drawal Sch	Act Drawal	UI	Requirement	Shortage	Consumption
	Thermal	Hydro	Gas/Naptha/ Diesel	Solar	Wind	OthersBiomass/Small Hyd/Co-gen etc.)	Total	(Net MU)	(Net MU)	(Net MU)	(Net MU)	(Net MU)	(Net MU)
PUNJAB	41.52	17.8	0	3.7	0	2.55	65.56	71.2	68.71	-2.49	134.27	0	134.27
HARYANA	37.59	0.97	0	0.14	0	0.97	39.68	114.41	115.52	1.11	155.2	0	155.2
RAJASTHAN	125.47	0	2.03	16.45	13.33	0.65	157.95	72.82	74.47	1.65	232.42	0	232.42
DELHI	0	0	16.52	0	0	1.21	17.73	97.34	96.47	-0.87	114.2	0	114.2
UTTAR PRADESH	198.49	9.99	0	3.36	0	14.4	226.24	182.32	182.45	0.13	408.69	0	408.69
UTTARAKHAND	0	16.65	6.56	0.6	0	0.25	24.06	18.13	16.14	-1.99	40.2	0	40.2
HIMACHAL PRADESH	0	10.66	0	0	0	8.73	19.39	5.13	6.33	1.2	25.72	0	25.72
JAMMU & KASHMIR	0	20.48	0	0	0	0	20.48	23.54	23.18	-0.36	54.02	10.36	43.66
CHANDIGARH	0	0	0	0	0	0	0	5.6	5.14	-0.46	5.14	0	5.14
Region	403.07	76.55	25.11	24.25	13.33	28.76	571.09	590.49	588.41	-2.08	1,169.86	10.36	1,159.5

2(B)State Demand Met (Peak and off-peak Hrs)

State	Evening Peak (20:00) MW				Off-Peak (03:00) MW			
	Demand Met	Shortage(-)/Surplus(+)	UI	STOA/PX Transaction	Demand Met	Shortage(-)/Sur ..	UI	STOA/PX Transaction
PUNJAB	5,920	0	-89	-96	5,200	0	-146	-298
HARYANA	7,422	0	210	936	7,231	0	-65	945
RAJASTHAN	9,073	0	-9	-585	9,423	0	-203	-82
DELHI	4,664	0	-104	493	4,890	0	51	641
UTTAR PRADESH	19,170	0	395	1,389	18,046	0	79	1,775
UTTARAKHAND	1,771	0	-141	267	1,664	0	-73	59
HIMACHAL PRADESH	1,142	0	64	-1,163	865	0	-173	-718
JAMMU & KASHMIR	2,087	522	281	-531	1,531	270	-256	-516
CHANDIGARH	226	0	-24	-86	180	0	-42	-45
Region	51,475	522	583	624	49,030	270	-828	1,761

2(C)State's Demand Met in MWs (Maximum Demand Met and Maximum requirement of the day details)

State	Maximum Demand, corresponding shortage and requirement details for the day				Maximum requirement, corresponding shortage and demand details for the day					
	Maximum Demand Met of the day	Time	Shortage(-) /Surplus(+) during at maximum demand	Requirement at the max demand met of the day	Maximum Requirement of the day	Time	Shortage(-) /Surplus(+) during at maximum Requirement	Demand Met at maximum requiremnet	Min Demand Met	Time
PUNJAB	7,129	23:00	0	7,129	7,129	23:00	0	7,129	4,503	14:00
HARYANA	8,204	24:00	0	8,204	8,204	24:00	0	8,204	5,025	9:00
RAJASTHAN	10,482	16:00	0	10,482	10,482	16:00	0	10,482	8,414	19:00
DELHI	5,608	24:00	0	5,608	5,608	24:00	0	5,608	3,732	9:00
UP	19,643	21:00	0	19,643	19,643	21:00	0	19,643	15,233	8:00
UTTARAKHAND	1,771	20:00	0	1,771	1,771	20:00	0	1,771	1,442	24:00
HP	1,245	8:00	0	1,245	1,245	8:00	0	1,245	850	4:00
J&K	2,190	21:00	548	2,738	2,738	21:00	548	2,190	1,531	3:00
CHANDIGARH	264	15:00	0	264	264	15:00	0	264	172	4:00
NR	53,996	23:00	497	54,493	54,493	23:00	497	53,996	44,740	9:00

3(A) State Entities Generation:

CHANDIGARH							
Station/Constituents	Inst. Capacity	N/A	N/A	Day Peak		Day Energy	AVG. MW
	(MW)	Peak MW	Off Peak MW	(MW)	Hrs	(MU)	
NIL							
Total	0	0	0			0	0
Total	0	0	0			0	0

DELHI							
Station/Constituents	Inst. Capacity	20:00	03:00	Day Peak		Day Energy	AVG. MW
	(MW)	Peak MW	Off Peak MW	(MW)	Hrs	(MU)	
BADARPUR TPS(2 * 210 + 3 * 100)	1,005	0	0	0			
RAJGHAT TPS(2 * 67.5)	135	0	0	0			
Total THERMAL	1,140	0	0			0	0
BAWANA GPS(2 * 253 + 4 * 216)	1,370	431	432	459		10.41	434
DELHI GAS TURBINES(3 * 34 + 6 * 30)	282	77	80	80.48		1.81	75
PRAGATI GAS TURBINES(1 * 121.2 + 2 * 104.6)	452	264	148	263.7		4.31	180
RITHALA GPS(3 * 36)	108	0	0	0			
Total GAS/NAPTHA/DIESEL	2,212	772	660			16.53	689
WIND	0	0	0	0			
BIOMASS(16)	16	44	34	44.4		1.21	50
SOLAR(2)	2	0	0	0			
Total DELHI	3,370	816	694			17.74	739

HARIYANA							
Station/Constituents	Inst. Capacity	20:00	03:00	Day Peak		Day Energy	AVG. MW
	(MW)	Peak MW	Off Peak MW	(MW)	Hrs	(MU)	
DCRTPP (YAMUNA NAGAR)(2 * 300)	600	504	533	571	00:00	11.46	478
JHAJJAR(CLP)(2 * 660)	1,320	511	744	1,013	01:00	16.48	687
MAGNUM DIESEL (IPP)(4 * 6.3)	25	0	0	0			
PANIPAT TPS(2 * 210 + 2 * 250)	920	407	416	446	00:00	9.66	403
RGTPP(KHEDAR)(2 * 600)	1,200	0	0	0			
Total THERMAL	4,065	1,422	1,693			37.6	1,568
FARIDABAD GPS(1 * 156.07 + 2 * 137.75)	432	0	0	0			
Total GAS/NAPTHA/DIESEL	432	0	0			0	0
TOTAL HYDRO HARYANA(64.8)	65	30	31	37	13:00	0.97	40
Total HYDEL	65	30	31			0.97	40
WIND	0	0	0	0			
BIOMASS(106)	106	0	0	0		0.97	40
SOLAR(55.8)	56	0	0	0		0.14	6
Total HARYANA	4,724	1,452	1,724			39.68	1,654

HIMACHAL PRADESH							
Station/Constituents	Inst. Capacity	20:00	03:00	Day Peak		Day Energy	AVG. MW
	(MW)	Peak MW	Off Peak MW	(MW)	Hrs	(MU)	
BASPA (IPP) HPS(3 * 100)	300	127	59	0		3.14	131
MALANA (IPP) HPS(2 * 43)	86	65	38	0		1.05	44
OTHER HYDRO HP(372)	372	316	281	0		6.47	270
Total HYDEL	758	508	378			10.66	445
WIND	0	0	0	0			
BIOMASS	0	0	0	0			
SOLAR	0	0	0	0			
SMALL HYDRO(486)	486	385	336	0		8.73	364
Total SMALL HYDRO	486	385	336			8.73	364
Total HP	1,244	893	714			19.39	809

JAMMU & KASHMIR							
Station/Constituents	Inst. Capacity	20:00	03:00	Day Peak		Day Energy	AVG. MW
	(MW)	Peak MW	Off Peak MW	(MW)	Hrs	(MU)	
GAS/DIESEL/OTHERS J&K(1 * 190)	190	0	0	0			
Total GAS/NAPTHA/DIESEL	190	0	0			0	0
BAGLIHAR (IPP) HPS(6 * 150)	900	736	736	0		17.5	729
OTHER HYDRO/IPP J&K(308)	308	137	97	0		2.98	124
Total HYDEL	1,208	873	833			20.48	853
WIND	0	0	0	0			
BIOMASS	0	0	0	0			
SOLAR	0	0	0	0			
SMALL HYDRO(98)	98	0	0	0			
Total SMALL HYDRO	98	0	0			0	0
Total J&K	1,496	873	833			20.48	853

PUNJAB							
Station/Constituents	Inst. Capacity	20:00	03:00	Day Peak		Day Energy	AVG. MW
	(MW)	Peak MW	Off Peak MW	(MW)	Hrs	(MU)	
GOINDWAL(GVK)(2 * 270)	540	0	0	0			
GURU GOBIND SINGH TPS (ROPAR)(6 * 210)	1,260	0	0	0		-0.09	-4
GURU HARGOBIND SINGH TPS (LEHRA MOHABBAT)(2 * 210 + 2 * 250)	920	0	0	0		-0.09	-4
GURU NANAK DEV TPS (BHATINDA)(4 * 110)	440	0	0	0		-0.01	0
RAJPURA(NPL) TPS(2 * 700)	1,400	660	683	1,320		19	792
TALWANDI SABO TPS(3 * 660)	1,980	924	924	1,425		22.71	946
Total THERMAL	6,540	1,584	1,607			41.52	1,730
TOTAL HYDRO PUNJAB(1000)	1,000	779	594	869		17.8	742
Total HYDEL	1,000	779	594			17.8	742
WIND	0	0	0	0			
BIOMASS(303)	303	0	0	0		2.55	106
SOLAR(859)	859	0	0	540		3.7	154
Total PUNJAB	8,702	2,363	2,201			65.57	2,732

RAJASTHAN							
Station/Constituents	Inst. Capacity	20:00	03:00	Day Peak		Day Energy	AVG. MW
	(MW)	Peak MW	Off Peak MW	(MW)	Hrs	(MU)	
BARSINGSAR (IPP) LTPS(2 * 125)	250	91	83	0		2	83
CHHABRA TPS(1 * 660 + 4 * 250)	1,660	1,433	1,317	0		31.45	1,310
GIRAL (IPP) LTPS(2 * 125)	250	0	0	0			
KALISINDH TPS(2 * 600)	1,200	520	520	0		11.79	491
KAWAI TPS(2 * 660)	1,320	1,056	1,176	0		22.14	923
KOTA TPS(2 * 110 + 2 * 195 + 3 * 210)	1,240	1,053	970	0		22.64	943
RAJWEST (IPP) LTPS(8 * 135)	1,080	645	635	0		13.31	555
SURATGARH TPS (6 * 250)	1,500	740	903	0		19.56	815
VSLPP (IPP)(1 * 135)	135	109	109	0		2.59	108
Total THERMAL	8,635	5,647	5,713			125.48	5,228
DHOLPUR GPS(3 * 110)	330	0	0	0			
RAMGARH GPS(1 * 110 + 1 * 35.5 + 1 * 50 + 2 * 37.5)	271	83	83	0		2.03	85
Total GAS/NAPTHA/DIESEL	601	83	83			2.03	85
RAPS-A(1 * 100 + 1 * 200)	300	0	0	0			
Total NUCLEAR	300	0	0			0	0
TOTAL HYDRO RAJASTHAN(550)	550	0	0	0			
Total HYDEL	550	0	0			0	0
WIND	4,292	225	753	0		13.33	555
BIOMASS(102)	102	27	27	0		0.65	27
SOLAR(3045)	3,045	1	0	0		16.45	685
Total RAJASTHAN	17,525	5,983	6,576			157.94	6,580

UTTAR PRADESH							
Station/Constituents	Inst. Capacity	20:00	03:00	Day Peak		Day Energy	AVG. MW
	(MW)	Peak MW	Off Peak MW	(MW)	Hrs	(MU)	
ANPARA TPS(2 * 500 + 3 * 210)	1,630	1,340	1,405	0		34.15	1,423
ANPARA-C TPS(2 * 600)	1,200	833	1,082	0		24.72	1,030
ANPARA-D TPS(2 * 500)	1,000	940	943	0		21.44	893
BAJAJ ENERGY PVT LTD (IPP) TPS(10 * 45)	450	40	22	0		0.64	27
BARA PPGCL TPS(3 * 660)	1,980	1,036	1,021	0		22.89	954
HARDUAGANJ TPS(1 * 105 + 1 * 60 + 2 * 250)	665	440	440	0		9.44	393
LALITPUR TPS(3 * 660)	1,980	1,841	1,030	0		27.14	1,131
MEJA TPS(1 * 660)	660	399	385	0		9.27	386
OBRA TPS (2 * 94 + 5 * 200)	1,188	471	473	0		11.95	498
PANKI TPS(2 * 105)	210	0	0	0			
PARICHA TPS(2 * 110 + 2 * 210 + 2 * 250)	1,380	599	606	0		13.33	555
ROSA TPS(4 * 300)	1,200	1,028	577	0		18.23	760
TANDA TPS(4 * 110)	440	251	162	0		5.3	221
Total THERMAL	13,983	9,218	8,146			198.5	8,271
ALAKHANDA HEP(4 * 82.5)	330	165	164	0		3.92	163
VISHNUPARYAG HPS(4 * 110)	440	198	197	0		4.9	204
OTHER HYDRO UP(527)	527	69	44	0		1.17	49
Total HYDEL	1,297	432	405			9.99	416
WIND	0	0	0	0			
BIOMASS(26)	26	0	0	0			
SOLAR(798)	798	0	0	0		3.36	140
CO-GENERATION(1360)	1,360	600	600	0		14.4	600
Total OTHERs	1,360	600	600			14.4	600
Total UP	17,464	10,250	9,151			226.25	9,427

UTTARAKHAND							
Station/Constituents	Inst. Capacity	20:00	03:00	Day Peak		Day Energy	AVG. MW
	(MW)	Peak MW	Off Peak MW	(MW)	Hrs	(MU)	
TOTAL GAS UK(450)	450	266	268	271	23:00	6.56	273
Total GAS/NAPTHA/DIESEL	450	266	268			6.56	273
OTHER HYDRO UK(1250)	1,250	707	670	744	10:00	16.65	694
Total HYDEL	1,250	707	670			16.65	694
WIND	0	0	0	0			
BIOMASS(127)	127	8	11	12	09:00	0.25	10
SOLAR(100)	100	0	0	91	12:00	0.6	25
SMALL HYDRO(180)	180	0	0	0			
Total SMALL HYDRO	180	0	0			0	0
Total UTTARAKHAND	2,107	981	949			24.06	1,002

(B) Regional Entities Generation										
Station/Constituents	Inst. Capacity	Declared Capacity	20:00	03:00	Day Peak		Day Energy		AVG. MW	UI
	(MW)	(MW)	Peak MW	Off Peak MW	(MW)	Hrs	SCHD (MU)	ACT (MU)		
Aravali Power Company Private Ltd										
ISTPP (JHAJJAR)(3 * 500)	1,500	942.5	277	275	321	02:15	6.22	6.2	258	-0.02
Sub-Total	1,500	942.5	277	275	-	-	6.22	6.2	258	-0.02
BBMB										
BHAKRA HPS(2 * 108 + 3 * 126 + 5 * 157)	1,379	844.5	1,268	559	1,268	20:00	20.27	20.32	847	0.05
DEHAR HPS(6 * 165)	990	607.92	645	645	645	20:00	14.59	14.79	616	0.2
PONG HPS(6 * 66)	396	118.38	192	66	192	20:00	2.84	2.87	120	0.03
Sub-Total	2,765	1,570.8	2,105	1,270	-	-	37.7	37.98	1,583	0.28
NHPC										
BAIRASIUL HPS(3 * 60)	180	0	0	0	0	-	0	-	-	0
CHAMERA HPS(3 * 180)	540	536.2	534	498	548	03:30	12.8	12.7	529	-0.1
CHAMERA II HPS(3 * 100)	300	299.35	303	301	307	00:00	6.61	6.62	276	0.01
CHAMERA III HPS(3 * 77)	231	203.67	228	234	234	01:00	4.87	4.81	200	-0.06
DHAULIGANGA HPS(4 * 70)	280	281.38	271	139	286	19:00	3.9	3.91	163	0.01
DULHASTI HPS(3 * 130)	390	311.25	315	307	326	23:00	7.47	7.44	310	-0.03
KISHANGANGA(3 * 110)	330	102.5	103	106	110	13:00	2.46	2.45	102	-0.01
PARBATI III HEP(4 * 130)	520	70.56	71	220	354	06:15	1.69	1.7	71	0.01
SALAL HPS(6 * 115)	690	662.55	594	703	707	17:00	15.9	15.7	654	-0.2
SEWA-II HPS(3 * 40)	120	125.62	133	126	133	20:00	3.02	3.01	125	-0.01
TANAKPUR HPS(1 * 31.42 + 2 * 31.4)	94	67.45	74	69	75	10:00	1.62	1.64	68	0.02
URI HPS(4 * 120)	480	478.65	480	480	484	12:00	11.49	11.47	478	-0.02
URI-II HPS(4 * 60)	720	240.92	245	243	245	20:00	5.78	5.81	242	0.03
Sub-Total	4,875	3,380.1	3,351	3,426	-	-	77.61	77.26	3,218	-0.35
NPCL										
NAPS(2 * 220)	440	388	426	430	436	07:00	9.31	9.26	386	-0.05
RAPS-B(2 * 220)	440	348	389	391	397	06:00	8.35	8.36	348	0.01
RAPS-C(2 * 220)	440	415	461	465	465	08:00	9.96	9.97	415	0.01
Sub-Total	1,320	1,151	1,276	1,286	-	-	27.62	27.59	1,149	-0.03
NTPC										
ANTA GPS(1 * 153.2 + 3 * 88.71)	419	147.78	213	233	242	05:45	4.52	4.47	186	-0.05
AURAIYA GPS(2 * 109.3 + 4 * 111.19)	663	636.88	0	0	0	-	0	-	-	0
DADRI GPS(2 * 154.51 + 4 * 130.19)	830	250.62	226	340	372	-	6.44	6.32	263	-0.12
DADRI SOLAR(1 * 5)	5	1.01	0	0	3	13:13	0.02	0.02	1	0
DADRI-I TPS(4 * 210)	840	768.6	422	422	422	20:00	10.15	10.19	425	0.04
DADRI-II TPS(2 * 490)	980	928.55	510	510	510	20:00	12.26	12.22	509	-0.04
KOLDAM HPS(4 * 200)	800	872	853	482	873	19:00	10	9.79	408	-0.21
RIHAND-I STPS(2 * 500)	1,000	902.89	992	857	992	20:00	21.67	21.96	915	0.29
RIHAND-II STPS(2 * 500)	1,000	942.5	987	1,001	987	20:00	22.62	21.82	909	-0.8
RIHAND-III STPS(2 * 500)	1,000	942.5	972	996	972	20:00	22.62	22.51	938	-0.11
SINGRAULI STPS(2 * 500 + 5 * 200)	2,000	1,675	1,780	1,799	1,780	20:00	39.98	39.76	1,657	-0.22
SINGRAULI SOLAR(1 * 15)	15	2.81	0	0	0	-	0.07	0.08	3	0.01
UNCHAHAH II TPS(2 * 210)	420	300	233	247	233	20:00	5.17	5.32	222	0.15
UNCHAHAH III TPS(1 * 210)	210	191.1	132	116	132	20:00	2.67	2.7	113	0.03
UNCHAHAH IV TPS(1 * 500)	500	471.25	299	284	299	20:00	6.65	6.59	275	-0.06
UNCHAHAH SOLAR(1 * 10)	10	2.06	0	0	0	-	0.05	0.05	2	0
UNCHAHAH TPS(2 * 210)	420	382.2	242	230	242	20:00	5.3	5.3	221	0
Sub-Total	11,112	9,417.75	7,861	7,517	-	-	170.19	169.1	7,047	-1.09
SJVNL										
NATHPA-JHAKRI HPS(6 * 250)	1,500	1,497.38	1,463	1,039	1,505	19:00	24.5	23.9	996	-0.6
RAMPUR HEP(6 * 68.67)	412	412.25	393	295	436	19:00	6.78	6.8	283	0.02
Sub-Total	1,912	1,909.63	1,856	1,334	-	-	31.28	30.7	1,279	-0.58
THDC										
KOTESHWAR HPS(4 * 100)	400	154.27	410	93	410	20:00	3.7	3.68	153	-0.02
TEHRI HPS(4 * 250)	1,000	490	488	489	496	17:00	7.83	7.73	322	-0.1
Sub-Total	1,400	644.27	898	582	-	-	11.53	11.41	475	-0.12
Total	24,884	19,016.05	17,624	15,690			362.15	360.24	15,009	-1.91

IPP/JV										
Station/Constituents	Inst. Capacity	Declared Capacity	20:00	03:00	Day Peak		Day Energy		AVG. MW	UI
	(MW)	(MW)	Peak MW	Off Peak MW	(MW)	Hrs	SCHD (MU)	ACT (MU)		
IPP										
ADHPL(IPP) HPS(2 * 96)	192	0	114	51	124	21:00	2.29	1.74	73	-0.55
BUDHIL HPS (IPP)(2 * 35)	70	0	69	59	70	23:00	1.14	1.05	44	-0.09
KARCHAM WANGTOO HPS(4 * 250)	1,000	0	1,000	470	1,000	19:00	13.51	13.14	548	-0.37
MALANA2(2 * 50)	100	0	105	50	105	22:00	0.99	1.05	44	0.06
SAINJ HEP(2 * 50)	100	0	0	0	0	-	0	0	0	0
SHREE CEMENT (IPP) TPS(2 * 150)	300	0	280	233	281	19:00	5.91	5.81	242	-0.1
Sub-Total	1,762	0	1,568	863	-	-	23.84	22.79	951	-1.05
SOLAR IPP										
AZURE POWER INDIA PVT LTD.(4 * 50)	200	-	0	0	85	12:45	-	0.6	25	0.6
RENEW SOLAR POWER PVT LTD(50)	50	-	0	0	40	12:25	-	0.03	1	0.03
SB ENERGY FOUR PVT LTD(2 * 100)	200	-	0	0	0	-	-	-	-	0
Sub-Total	450	0	0	0	-	-	0	0.63	26	0.63
Total	2,212	0	1,568	863			23.84	23.42	977	-0.42
Summary Section										
	Inst. Capacity		PEAK	OFF-PEAK			Day Energy		Day AVG.	
Total State Control Area Generation		56,632	23,611	22,842			571.11		23,796	
J. Net Inter Regional Exchange [Import (+ve)/Export (-ve)]			8,819	10,085			215.11		11,170	
Total Regional Availability(Gross)		83,728	51,622	49,480			1,169.88		50,952	
Total Hydro Generation										
	Inst. Capacity		PEAK	OFF-PEAK			Day Energy		Day AVG.	
Regional Entities Hydro		13,214	10,351	7,724			184.12		7,672	
State Control Area Hydro		6,128	3,329	2,911			76.55		3,190	
Total Regional Hydro		19,342	13,680	10,635			260.67		10,862	
Total Renewable Generation										
	Inst. Capacity		PEAK	OFF-PEAK			Day Energy		Day AVG.	
Regional Entities Renewable		480	0	0			0.78		32	
State Control Area Renewable		10,596	690	1,161			51.94		2,164	
Total Regional Renewable		11,076	690	1,161			52.72		2,196	
4(A) INTER-REGIONAL EXCHANGES (Import=(+ve) /Export =(-ve))										
SL.No.	Element	20:00	03:00	Maximum Interchange (MW)		Import in MU	Export in MU	NET		
		(MW)	MW	Import (MW)	Export (MW)					
Import/Export between EAST REGION and NORTH REGION										
1	132KV-Garhwa-Rihand	-	-	-	-	-	-	-		
2	132KV-Karmnasa(PG)-Sahupuri(U ..	-	-	-	-	-	-	-		
3	132KV-Rihand-Sonnagar(PG)	-	-	-	-	-	-	-		
4	220KV-Pusauli(PG)-Sahupuri(UP)	-201	-195	-203	0	4.03	0	4.03		
5	400KV-Biharsharif(PG)-Baliala(PG)	342	501	568	0	9.66	0	9.66		
6	400KV-Biharsharif(PG)-Varanasi(P..	-	-	-	-	-	-	-		
7	400KV-Fatehpur(UP)-Sasaram	-	-	-	-	-	-	-		
8	400KV-Motihari(DMT)-Gorakhpur ..	98	294	332	0	5.29	0	5.29		
9	400KV-Muzaffarpur(PG)-Gorakhp ..	598	990	1,144	0	22.11	0	22.11		
10	400KV-Patna(PG)-Baliala(PG)	554	900	1,013	0	17.14	0	17.14		
11	400KV-Sasaram-Allahabad(PG)	-2	6	-2	31	0	0.28	-0.28		
12	400KV-Sasaram-Varanasi(PG)	-45	-55	-80	0	1.36	0	1.36		
13	765KV-Fatehpur(PG)-Sasaram.	-20	244	327	20	5.18	0	5.18		
14	765KV-Gaya(PG)-Baliala(PG)	127	191	191	0	3.59	0	3.59		
15	765KV-Gaya(PG)-Varanasi(PG)	188	60	278	-	2.5	0	2.5		
16	HVDC PUSAULI B/B	50	50	50	0	1.24	0	1.24		
17	HVDC800KV-Alipurduar-Agra(PG)	-	-	-	-	-	-	-		
Sub-Total EAST REGION		1,689	2,986	3,618	51	72.1	0.28	71.82		
Import/Export between NORTH_EAST REGION and NORTH REGION										
1	HVDC800KV-BiswanathCharialli- ..	-500	-500	-	700	0	11.91	-11.91		
Sub-Total NORTH_EAST REGION		-500	-500	0	700	0	11.91	-11.91		
Import/Export between WEST REGION and NORTH REGION										
1	220KV-Auraiya(NT)-Malanpur(PG)	19	17	-	45	0	0.15	-0.15		
2	220KV-Bhanpur-Modak	13	29	84	-	0.99	0	0.99		
3	220KV-Ranpur-Bhanpur	44	63	105	-	1.74	0	1.74		
4	400KV-RAPS C(NP)-Sujalpur	230	112	286	-	2.81	0	2.81		
5	400KV-Vindhyachal(PG)-Rihand(N ..	-942	-940	0	962	0	22.62	-22.62		
6	400KV-Zerda(PG)-Bhinmal(PG)	134	16	156	64	0	1.37	-1.37		
7	400KV-Zerda(PG)-Kankroli(RJ)	-53	-46	44	187	0	1.6	-1.6		
8	765KV-0rai-Gwalior(PG)	-467	-431	0	528	0	11.24	-11.24		
9	765KV-0rai-Jabalpur	1,470	1,531	1,678	0	31.43	0	31.43		
10	765KV-0rai-Satna	1,285	1,308	1,357	0	29.04	0	29.04		
11	765KV-Chittorgarh-Banaskata D/C	171	348	364	532	0	3.19	-3.19		
12	765KV-Gwalior(PG)-Agra(PG)	2,206	2,202	2,522	0	48.38	0	48.38		
13	765KV-Phagi(RJ)-Gwalior(PG)	1,072	942	1,072	-	23.14	0	23.14		
14	HVDC500KV-Mundra(JH)-Mohind..	1,198	1,198	1,203	0	29.07	0	29.07		

Import/Export between WEST REGION and NORTH REGION								
15	HVDC500KV-Vindhyachal(PG)-Vindhyachal B/B	-250	-250	0	250	0	6.03	-6.03
16	HVDC800KV-Champa(PG)-Kuruks..	1,500	1,500	2,000	0	34.8	0	34.8
Sub-Total WEST REGION		7,630	7,599	10,871	2,568	201.4	46.2	155.2
TOTAL IR EXCHANGE		8,819	10,085	14,489	3,319	273.5	58.39	215.11

4(B) Inter Regional Schedule & Actual Exchange (Import=(+ve) /Export =(-ve)) in MU

	ISGS/(LT+MT) Schedule	BILT Schedule	PX Schedule	Total IR Schedule	Total IR Actual	NET IR UI
NR-ER	45.05	-3.78	2.28	43.55	71.82	28.27
NR-WR	165.31	27.71	-6.69	186.33	155.2	-31.13
Total	210.36	23.93	-4.41	229.88	215.11	-14.77

5.Inter National Exchange with Nepal [Import (+ve)/Export(-ve)] [Linkwise]

Element	Peak	Off-Peak	Maximum Interchange(MW)		Energy (MU)		Net Energy
	MW	MW	Import	Export	Import	Export	(MU)
132KV-Tanakpur(NH)-Mahendranagar(PG)	-31	-28		32		0.6013	-0.6013

5.Frequency Profile

RANGE(Hz)	N/A	N/A	< 49.8	< 49.9	N/A	N/A	N/A	N/A	N/A	> 50.05
%	0	0	0	1.7	21.2	56.8	26.6	13	1.8	41.5

<-----Frequency (Hz)----->

Maximum		Minimum		Average Frequency	Freq Variation Index	Standard Deviation	Freq. in 15 mnt blk		Freq Dev Index (% of Time)
Frequency	Time	Frequency	Time				Max.	Min.	
50.33	18:02:10	49.81	13:40:00	50.04	0.056	0.062	50.22	49.88	0.00

6.Voltage Profile: 400kV

	Maximum		Minimum		Voltage (in %)				Voltage Deviation Index (% of time)
STATION	VOLTAGE	TIME	VOLTAGE	TIME	< 380	< 390	> 420	> 430	
Abdullapur(PG) - 400KV	418	08:15	396	23:05	0	0	0	0	0
Amritsar(PG) - 400KV	418	12:00	401	22:30	0	0	0	0	0
Ballabgarh(PG) - 400KV	421	08:00	396	23:05	0	0	1.74	0	1.74
Bareilly II(PG) - 400KV	419	08:10	399	00:00	0	0	0	0	0
Bareilly(UP) - 400KV	420	08:15	400	00:00	0	0	0	0	0
Baspa(HP) - 400KV	416	08:05	401	22:10	0	0	0	0	0
Bassi(PG) - 400KV	416	08:00	395	22:50	0	0	0	0	0
Bawana(DTL) - 400KV	422	08:15	399	23:15	0	0	6.94	0	6.94
Dadri HVDC(PG). - 400KV	420	08:05	420	08:05	.35	.35	.35	0	.7
Gorakhpur(PG) - 400KV	419	08:05	397	00:20	0	0	0	0	0
Hisar(PG) - 400KV	419	08:15	394	23:10	0	0	0	0	0
Kanpur(PG) - 400KV	421	08:05	404	22:30	0	0	1.74	0	1.74
Kashipur(UT) - 400KV					0	0	0	0	0
Kishenpur(PG) - 400KV	419	08:15	402	06:45	0	0	0	0	0
Moga(PG) - 400KV	417	08:05	399	23:10	0	0	0	0	0
Nallagarh(PG) - 400KV	416	08:05	401	22:10	0	0	0	0	0
Rihand HVDC(PG) - 400KV	405	08:20	405	08:20	.35	.35	0	0	.35
Rihand(NT) - 400KV	404	08:20	404	08:20	.35	.35	0	0	.35

6.1 Voltage Profile: 765kV

	Maximum		Minimum		Voltage (in %)				Voltage Deviation Index (% of time)
STATION	VOLTAGE	TIME	VOLTAGE	TIME	< 728	< 742	> 800	> 820	
Anta RS(RJ) - 765KV	790	08:05	770	22:15	0	0	0	0	0
Balia(PG) - 765KV	794	08:10	762	00:20	0	0	0	0	0
Bareilly II(PG) - 765KV	800	08:15	762	22:30	0	0	.35	0	.35
Bhiwani(PG) - 765KV	802	08:05	762	22:35	0	0	3.47	0	3.47
Fatehpur(PG) - 765KV	776	08:15	747	22:35	0	0	0	0	0
Jhatikara(PG) - 765KV	799	08:15	756	22:40	0	0	0	0	0
Lucknow II(PG) - 765KV	801	08:05	760	22:35	0	0	1.74	0	1.74
Meerut(PG) - 765KV	804	08:15	764	22:35	0	0	4.86	0	4.86
Moga(PG) - 765KV	793	08:15	756	23:05	0	0	0	0	0
Phagi(RJ) - 765KV	796	08:05	764	22:35	0	0	0	0	0
Unnao(UP) - 765KV	773	08:10	742	00:00	0	1.39	0	0	0

7(A). Short-Term Open Access Details:

State	Off- Peak Hours (03:00)			Peak Hours (20:00)			Day Energy (MU)			
	Bilateral (MW)	IEX (MW)	PXIL (MW)	Bilateral (MW)	IEX (MW)	PXIL (MW)	ISGS / (LT+MT) Schedule	BILT Schedule	PX Schedule	Total (MU)
PUNJAB	-297.65	0	0	-95.85	0	0	75.02	-3.71	-0.1	71.2
HARYANA	783.66	161.03	0	787.83	148.51	0	94.18	17.78	2.45	114.41
RAJASTHAN	-244.44	162.08	0	-123.29	-461.89	0	75.74	-3.69	0.76	72.82
DELHI	406.77	234.17	0	309.34	184.09	0	80.82	9.09	7.43	97.34
UTTAR PRADESH	1,839.05	-64.42	0	1,209.14	179.69	0	156.38	27.67	-1.73	182.32
UTTARAKHAND	110.21	-50.73	0	110.21	156.93	0	15.11	2.64	0.38	18.13
HIMACHAL PRADESH	-462.04	-256.2	0	-463.36	-699.2	0	25.53	-10.06	-10.34	5.13
JAMMU & KASHMIR	-516.04	0	0	-517.15	-13.35	0	36.05	-12.4	-0.11	23.54
CHANDIGARH	0	-45.4	0	0	-85.76	0	6.43	0	-0.84	5.6
TOTAL	1,619.52	140.53	0	1,216.87	-590.98	0	565.26	27.32	-2.1	590.49

7(B). Short-Term Open Access Details

State	ISGS/(LT+MT) Schedule		Bilateral (MW)		IEX (MW)		PXIL (MW)	
	Maximum	Minimum	Maximum	Minimum	Maximum	Minimum	Maximum	Minimum
PUNJAB	4,010.89	1,966.98	-95.85	-297.65	0	-100.9	0	0
HARYANA	5,388.79	2,383.61	820.26	612.95	177.3	-136.45	0	0
RAJASTHAN	3,712.76	2,309.16	-123.29	-244.44	162.37	-461.89	0	0
DELHI	3,880.76	2,795.27	466.24	307.14	654.13	-77.57	0	0
UTTAR PRADESH	8,140.67	5,240.04	1,884.64	717.43	301.88	-773.75	0	0
UTTARAKHAND	892.87	449.64	110.21	110.21	185.87	-104.59	0	0
HIMACHAL PRADESH	1,481.7	762.18	-256.13	-641.47	-163.92	-948.28	0	0
JAMMU & KASHMIR	1,909.54	1,184.18	-516.04	-517.15	0	-13.35	0	0
CHANDIGARH	343.77	219.04	0	0	0	-85.76	0	0

8.Major Reservoir Particulars

RESERVOIR	Parameters			Present Parameters		LAST YEAR		LAST DAY	
	MDDL (Mts)	FRL (Mts)	Energy Content at FRL	Level (Mts)	Energy (MU)	Level (Mts)	Energy (MU)	Inflow (m3/s)	Usage (m3/s)
Bhakra	445.62	513.59	1,729	494.89	903	467.9	235	614.64	642.03
Chamera-I	748.75	760	754	752.94	-	-	-	271.32	344.33
Gandhisagar	295.78	295.78	725	-	-	-	-	-	0
Jawahar Sagar	295.78	298.7	0	-	-	-	-	-	0
Koteshwar	598.5	612.5	611	610.58	5	610.08	5	240	243.31
Pong	384.05	426.72	1,084	408.98	464	394.09	112	121.14	190.63
RPS	343.81	352.8	176	-	-	-	-	-	0
RSD	487.91	527.91	390	522.18	8	498.86	3	328.62	279.19
Rihand	252.98	268.22	861	-	-	-	-	-	0
Tehri	740.04	829.79	1,291	761.5	133	751.25	58	128.44	240
TOTAL	-	-	-	-	1,513	-	413	1,704.16	1,939.49

9. System Reliability Indices(Violation of TTC and ATC):

(i)%age of times N-1 Criteria was violated in the inter - regional corridors

WR	0
ER	0
Simultaneous	0

ii)%age of times ATC violated on the inter-regional corridors

WR	0
ER	0
Simultaneous	0

iii)%age of times Angular Difference on Important Buses was beyond permissible limits(40 deg.)

Rihand-Dadri	0
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10. Zero Crossing Violations

State	No. of violations(Maximum 15 in a day)	Maximum number of continuous blocks without sign change
CHANDIGARH	10	35
DELHI	6	19
HARYANA	3	10
HIMACHAL PRADESH	0	6
JAMMU & KASHMIR	6	17
PUNJAB	4	11
RAJASTHAN	1	8
UTTAR PRADESH	1	9
UTTARAKHAND	7	17

11.Significant events (If any):

12.Grid Disturbance / Any Other Significant Event:

13.Weather Conditions :

14.Synchronisation of new generating units :

15.Synchronisation of new 220 / 400 / 765 KV lines and energising of bus / /substation :

- 1) 220 kV Gorakhpur(PG)-Gola line-1 first time charged and synchronized at 13:17 Hrs (01.05.2019)
- 2) 125 MVA ICT-4 at Surya Urja first time charged on no load at 19.56 hrs. on 01.05.19

16.Tripping of lines in pooling stations :

17.Complete generation loss in a generating station :

Note: Data(regarding drawal,generation, shortage , inter-regional flows and reservoir levels)of the constituents filled in the report are as per last furnished data by the respective state/constituent to NRLDC.

Shift In Charge