



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

Power Supply Position in Northern Region For 24-Dec-2018

Date of Reporting:25-Dec-2018

1. Regional Availability/Demand:

Evening Peak (19:00) 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
45,963	687	46,650	50.05	29,985	326	30,311	50.07	936	17.27

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

State	State's Control Area Generation (Net MU)							Drawal Sch (Net MU)	Act Drawal (Net MU)	UI (Net MU)	Requirement (Net MU)	Shortage (Net MU)	Consumption (Net MU)
	Thermal	Hydro	Gas/Naptha/Diesel	Solar	Wind	OthersBiomass/Small Hyd/Co-gen etc.)	Total						
PUNJAB	66.46	12.54	0	3.8	0	1.07	83.87	27.29	26.15	-1.14	110.02	0	110.02
HARYANA	56.88	0.57	0	0.11	0	1.16	58.72	66.23	66.79	0.56	125.51	0	125.51
RAJASTHAN	136.44	5.32	1.78	14.33	20.69	4.34	182.89	51.89	55.03	3.14	237.92	0	237.92
DELHI	0	0	15.61	0	0	0.78	16.38	51.03	50.86	-0.17	67.24	0	67.24
UTTAR PRADESH	127	7.1	0	2.6	0	21.6	158.3	116.81	118.27	1.46	283.33	6.76	276.57
UTTARAKHAND	0	8.98	2.47	0.56	0	0.68	12.69	24.9	24.54	-0.36	37.23	0	37.23
HIMACHAL PRADESH	0	3.87	0	0	0	2.27	6.14	21.56	22.49	0.93	28.64	0.01	28.63
JAMMU & KASHMIR	0	3.55	0	0	0	1.62	5.17	42.35	43.96	1.61	59.63	10.5	49.13
CHANDIGARH	0	0	0	0	0	0	0	3.33	3.59	0.26	3.59	0	3.59
Region	386.78	41.93	19.86	21.4	20.69	33.52	524.16	405.39	411.68	6.29	953.11	17.27	935.84

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

State	Evening Peak (19:00) MW				Off-Peak (03:00) MW			
	Demand Met	Shortage(-)/Surplus(+)	UI	STOA/PX Transaction	Demand Met	Shortage(-)/Sur ..	UI	STOA/PX Transaction
PUNJAB	5,685	0	12	-1,692	3,218	0	-24	-1,298
HARYANA	6,752	0	96	-846	3,910	0	60	-890
RAJASTHAN	10,491	0	-30	-1,068	7,515	0	56	-3
DELHI	3,485	0	33	-606	1,563	0	52	-1,351
UTTAR PRADESH	13,637	110	39	87	9,893	0	17	19
UTTARAKHAND	1,941	0	41	639	1,158	0	17	391
HIMACHAL PRADESH	1,474	0	168	444	798	0	-15	385
JAMMU & KASHMIR	2,308	577	58	1,102	1,849	326	109	707
CHANDIGARH	189	0	20	0	81	0	-18	-25
Region	45,962	687	437	-1,940	29,985	326	254	-2,065

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	5,685	19:00	0	5,685	5,685	19:00	0	5,685	3,218	3:00
HARYANA	6,752	19:00	0	6,752	6,752	19:00	0	6,752	3,821	2:00
RAJASTHAN	12,051	10:00	230	12,281	12,281	10:00	230	12,051	6,871	5:00
DELHI	3,963	12:00	0	3,963	3,963	12:00	0	3,963	1,496	4:00
UP	13,637	19:00	110	13,747	13,747	19:00	110	13,637	9,785	4:00
UTTARAKHAND	2,044	8:00	0	2,044	2,044	8:00	0	2,044	1,102	2:00
HP	1,560	8:00	0	1,560	1,560	8:00	0	1,560	788	2:00
J&K	2,399	8:00	600	2,999	2,999	8:00	600	2,399	1,849	3:00
CHANDIGARH	228	9:00	0	228	228	9:00	0	228	79	2:00
NR	45,963	19:00	687	46,650	46,650	19:00	687	45,963	29,721	4:00

3(A) State Entities Generation:

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

DELHI							
Station/Constituents	Inst. Capacity	19:00	03:00	Day Peak		Day Energy	AVG. MW
	(MW)	Peak MW	Off Peak MW	(MW)	Hrs	(MU)	
BADARPUR TPS(2 * 210 + 3 * 100)	705	0	0	0			
RAJGHAT TPS(2 * 67.5)	135	0	0	0			
Total THERMAL	840	0	0			0	0
BAWANA GPS(2 * 253 + 4 * 216)	1,370	453	435	465		10.66	444
DELHI GAS TURBINES(3 * 34 + 6 * 30)	282	40	70	115.3		1	42
PRAGATI GAS TURBINES(1 * 121.2 + 2 * 104.6)	331	162	162	166.86		3.94	164
RITHALA GPS(3 * 36)	108	0	0	0			
Total GAS/NAPHTHA/DIESEL	2,091	655	667			15.6	650
WIND	0	0	0	0			
BIOMASS(1 * 16)	16	24	30	33.65		0.78	33
SOLAR(1 * 2)	2	0	0	0			
Total DELHI	2,949	679	697			16.38	683

HARIYANA							
Station/Constituents	Inst. Capacity	19:00	03:00	Day Peak		Day Energy	AVG. MW
	(MW)	Peak MW	Off Peak MW	(MW)	Hrs	(MU)	
DCRTPP (YAMUNA NAGAR)(2 * 300)	600	569	491	569	19:00	12.04	502
JHAJJAR(CLP)(2 * 660)	1,320	1,180	739	1,180	19:00	22.09	920
MAGNUM DIESEL (IPP)(4 * 6.3)	25	0	0	0			
PANIPAT TPS(2 * 210 + 2 * 250)	920	591	400	641	10:00	13.19	550
RGTPP(KHEDAR)(2 * 600)	1,200	399	387	551	11:00	9.57	399
Total THERMAL	4,065	2,739	2,017			56.89	2,371
FARIDABAD GPS(1 * 156.07 + 2 * 137.75)	432	0	0	0	00:00	0	0
Total GAS/NAPHTHA/DIESEL	432	0	0			0	0
TOTAL HYDRO HARYANA(1 * 62)	62	12	18	24	15:00	0.57	24
Total HYDEL	62	12	18			0.57	24
WIND	0	0	0	0			
BIOMASS(1 * 106)	106	0	0	0		1.16	48
SOLAR(1 * 50)	50	0	0	0		0.11	5
Total HARYANA	4,715	2,751	2,035			58.73	2,448

HIMACHAL PRADESH							
Station/Constituents	Inst. Capacity	19:00	03:00	Day Peak		Day Energy	AVG. MW
	(MW)	Peak MW	Off Peak MW	(MW)	Hrs	(MU)	
BASPA (IPP) HPS(3 * 100)	300	60	30	0		1.3	54
MALANA (IPP) HPS(2 * 43)	86	45	0	0		0.27	11
OTHER HYDRO HP(1 * 372)	372	157	41	0		2.29	95
Total HYDEL	758	262	71			3.86	160
WIND	0	0	0	0			
BIOMASS	0	0	0	0			
SOLAR	0	0	0	0			
SMALL HYDRO(1 * 486)	486	153	53	0		2.27	95
Total SMALL HYDRO	486	153	53			2.27	95
Total HP	1,244	415	124			6.13	255

JAMMU & KASHMIR							
Station/Constituents	Inst. Capacity	19:00	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/NAPHTHA/DIESEL	190	0	0			0	0
BAGLIHAR (IPP) HPS(6 * 150)	900	148	148	148		3.55	148
OTHER HYDRO/IPP J&K(1 * 308)	308	0	0	0			
Total HYDEL	1,208	148	148			3.55	148
WIND	0	0	0	0			
BIOMASS	0	0	0	0			
SOLAR	0	0	0	0			
SMALL HYDRO(1 * 98)	98	104	50	106		1.62	68
Total SMALL HYDRO	98	104	50			1.62	68
Total J&K	1,496	252	198			5.17	216

PUNJAB							
Station/Constituents	Inst. Capacity	19:00	03:00	Day Peak		Day Energy	AVG. MW
	(MW)	Peak MW	Off Peak MW	(MW)	Hrs	(MU)	
GOINDWAL(GVK)(2 * 270)	540	440	290	491		8.71	363
GURU GOBIND SINGH TPS (ROPAR)(6 * 210)	1,260	0	0	0		0.12	5
GURU HARGOBIND SINGH TPS (LEHRA MOHABBAT)(2 * 210 + 2 * 250)	920	166	170	233		4.26	178
GURU NANAK DEV TPS (BHATINDA)(4 * 110)	460	0	0	0			
RAJPURA(NPL) TPS(2 * 700)	1,400	1,320	660	1,320		25.07	1,045
TALWANDI SABO TPS(3 * 660)	1,980	1,625	924	1,841		28.3	1,179
Total THERMAL	6,560	3,551	2,044			66.46	2,770
TOTAL HYDRO PUNJAB(1 * 1000)	1,000	462	399	627		12.54	523
Total HYDEL	1,000	462	399			12.54	523
WIND	0	0	0	0			
BIOMASS(1 * 303)	303	0	0	0		1.07	45
SOLAR(1 * 859)	859	0	0	470		3.8	158
Total PUNJAB	8,722	4,013	2,443			83.87	3,496

RAJASTHAN							
Station/Constituents	Inst. Capacity	19:00	03:00	Day Peak		Day Energy	AVG. MW
	(MW)	Peak MW	Off Peak MW	(MW)	Hrs	(MU)	
BARSINGSAR (IPP) LTPS(2 * 125)	250	223	225	0		5.25	219
CHHABRA TPS(1 * 660 + 4 * 250)	1,660	1,178	1,309	0		30.19	1,258
GIRAL (IPP) LTPS(2 * 125)	250	0	0	0			
KALISINDH TPS(2 * 600)	1,200	1,132	776	0		24.18	1,008
KAWAI TPS(2 * 660)	1,320	1,242	856	0		25.65	1,069
KOTA TPS(2 * 110 + 2 * 195 + 3 * 210)	1,240	1,108	875	0		24.76	1,032
RAJWEST (IPP) LTPS(8 * 135)	1,080	481	312	0		10.85	452
SURATGARH TPS(6 * 250)	1,500	650	535	0		13.06	544
VSLPP (IPP)(1 * 135)	135	106	105	0		2.5	104
Total THERMAL	8,635	6,120	4,993			136.44	5,686
DHOLPUR GPS(3 * 110)	330	0	0	0			
RAMGARH GPS(1 * 110 + 1 * 35.5 + 1 * 50 + 2 * 37.5)	271	71	74	0		1.78	74
Total GAS/NAPHTHA/DIESEL	601	71	74			1.78	74
RAPS-A(1 * 100 + 1 * 200)	300	165	161	0		3.76	157
Total NUCLEAR	300	165	161			3.76	157
TOTAL HYDRO RAJASTHAN(1 * 550)	550	219	203	0		5.32	222
Total HYDEL	550	219	203			5.32	222
WIND	4,292	519	1,101	0		20.69	862
BIOMASS(1 * 102)	102	24	24	0		0.57	24
SOLAR(1 * 1995)	1,995	3	0	0		14.33	597
Total RAJASTHAN	16,475	7,121	6,556			182.89	7,622

UTTAR PRADESH							
Station/Constituents	Inst. Capacity	19:00	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	1,300	1,214	0		30.3	1,263
ANPARA-C TPS(2 * 600)	1,200	601	584	0		15.9	663
ANPARA-D TPS(2 * 500)	1,000	540	962	0		15.8	658
BAJAJ ENERGY PVT LTD (IPP) TPS(10 * 45)	450	0	0	0			
BARA PPGCL TPS(3 * 660)	1,980	972	671	0		21.5	896
HARDUAGANJ TPS(1 * 105 + 1 * 60 + 2 * 250)	665	446	252	0		9.4	392
LALITPUR TPS(3 * 660)	1,980	0	0	0			
MEJA TPS(1 * 660)	660	0	0	0			
OBRA TPS (2 * 94 + 5 * 200)	1,188	477	211	0		8.5	354
PANKI TPS(2 * 105)	210	0	0	0			
PARICHA TPS(2 * 110 + 2 * 210 + 2 * 250)	1,160	594	339	0		12.7	529
ROSA TPS(4 * 300)	1,200	268	150	0		5	208
TANDA TPS(4 * 110)	440	350	215	0		7.9	329
Total THERMAL	13,763	5,548	4,598			127	5,292
ALAKHANDA HEP(4 * 82.5)	330	82	143	0		1.4	58
VISHNUPARYAG HPS(4 * 110)	440	83	78	0		1.9	79
OTHER HYDRO UP(1 * 527)	527	159	118	0		3.8	158
Total HYDEL	1,297	324	339			7.1	295
WIND	0	0	0	0			
BIOMASS(1 * 26)	26	0	0	0			
SOLAR(1 * 472)	472	0	0	0		2.6	108
CO-GENERATION(1 * 1360)	1,360	900	900	0		21.6	900
Total OTHERs	1,360	900	900			21.6	900
Total UP	16,918	6,772	5,837			158.3	6,595

UTTARAKHAND										
Station/Constituents	Inst. Capacity	19:00	03:00	Day Peak		Day Energy	AVG. MW			
	(MW)	Peak MW	Off Peak MW	(MW)	Hrs	(MU)				
TOTAL GAS UK(1 * 450)	450	102	95	105	09:00	2.47	103			
Total GAS/NAPHTHA/DIESEL	450	102	95			2.47	103			
OTHER HYDRO UK(1 * 1250)	1,250	561	254	608	10:00	8.98	374			
Total HYDEL	1,250	561	254			8.98	374			
WIND	0	0	0	0						
BIOMASS(1 * 127)	127	29	28	30	12:00	0.68	28			
SOLAR(1 * 100)	100	0	0	84	12:00	0.56	23			
SMALL HYDRO(1 * 180)	180	0	0	0						
Total SMALL HYDRO	180	0	0			0	0			
Total UTTARAKHAND	2,107	692	377			12.69	528			

3(B) Regional Entities Generation

Station/Constituents	Inst. Capacity	Declared Capacity	19:00	03:00	Day Peak		Day Energy		AVG. MW	UI
	(MW)	(MW)	Peak MW	Off Peak MW	(MW)	Hrs	SCHD (MU)	ACT (MU)		
BBMB										
BHAKRA HPS(2 * 108 + 3 * 126 + 5 * 157)	1,379	683.47	1,090	542	1,090	19:00	16.4	16.5	688	0.1
DEHAR HPS(6 * 165)	990	150.52	495	0	495	19:00	3.61	3.78	158	0.17
PONG HPS(6 * 66)	396	293.18	330	264	330	19:00	7.04	6.98	291	-0.06
Sub-Total	2,765	1,127.17	1,915	806	-	-	27.05	27.26	1,137	0.21
NHPC										
BAIRASIUL HPS(3 * 60)	180	0	0	0	0	-	0	-	-	0
CHAMERA HPS(3 * 180)	540	535.58	363	0	554	07:15	2.3	2.41	100	0.11
CHAMERA II HPS(3 * 100)	300	187.27	204	30	204	19:00	1.28	1.48	62	0.2
CHAMERA III HPS(3 * 77)	231	153	152	0	155	07:00	0.7	0.78	33	0.08
DHAULIGANGA HPS(4 * 70)	280	281.38	283	0	291	06:00	0.98	1.04	43	0.06
DULHASTI HPS(3 * 130)	390	386.9	389	0	394	07:00	3.1	3.2	133	0.1
KISHANGANGA(2 * 110)	220	43.19	218	20	218	07:00	1.04	1.15	48	0.11
PARBATI III HEP(4 * 130)	520	0	0	0	0	-	0	0	0	0
SALAL HPS(6 * 115)	690	110	350	115	350	19:00	2.64	3.03	126	0.39
SEWA-II HPS(3 * 40)	120	120.2	40	0	125	18:00	0.39	0.42	18	0.03
TANAKPUR HPS(1 * 31.42 + 2 * 31.4)	94	27.85	24	22	64	04:00	0.67	0.66	28	-0.01
URI HPS(4 * 120)	480	129.69	351	60	360	08:00	3.11	3.56	148	0.45
URI-II HPS(4 * 60)	480	82.73	182	80	183	20:00	1.99	2.1	88	0.11
Sub-Total	4,525	2,057.79	2,556	327	-	-	18.2	19.83	827	1.63
NPCL										
NAPS(2 * 220)	440	414	447	455	459	06:00	9.94	9.93	414	-0.01
RAPS-B(2 * 220)	440	182	204	207	207	03:00	4.37	4.3	179	-0.07
RAPS-C(2 * 220)	440	430	474	475	476	06:00	10.32	10.24	427	-0.08
Sub-Total	1,320	1,026	1,125	1,137	-	-	24.63	24.47	1,020	-0.16
NTPC										
ANTA GPS(1 * 153.2 + 3 * 88.71)	419	361.99	0	0	176	07:47	0.7	0.77	32	0.07
AURAIYA GPS(2 * 109.3 + 4 * 111.19)	663	646.5	0	0	0	-	0	-	-	0
DADRI GPS(2 * 154.51 + 4 * 130.19)	830	354.38	231	227	231	19:00	6.92	7.21	300	0.29
DADRI SOLAR(1 * 5)	5	0.68	0	0	2	12:46	0.02	0.01	0	-0.01
DADRI-I TPS(4 * 210)	840	571.38	553	204	553	19:00	10.77	10.47	436	-0.3
DADRI-II TPS(2 * 490)	980	928.55	926	540	926	19:00	18.29	18.78	783	0.49
ISTPP (JHAJJAR)(3 * 500)	1,500	947.5	794	572	1,018	11:14	17.66	17.48	728	-0.18
KOLDAM HPS(4 * 200)	800	872	521	0	660	18:00	2.61	2.68	112	0.07
RIHAND-I STPS(2 * 500)	1,000	905.47	964	739	964	19:00	20.39	19.95	831	-0.44
RIHAND-II STPS(2 * 500)	1,000	938.65	1,003	745	1,003	19:00	21.38	21.69	904	0.31
RIHAND-III STPS(2 * 500)	1,000	942.5	1,019	725	1,019	19:00	20.74	20.8	867	0.06
SINGRAULI STPS(2 * 500 + 5 * 200)	2,000	1,862.5	2,025	1,496	2,025	19:00	42.08	42.38	1,766	0.3
SINGRAULI SOLAR(1 * 15)	15	2.4	0	0	0	-	0.06	0.06	3	0
UNCHAHAH II TPS(2 * 210)	420	382.2	411	221	411	19:00	7.51	7.99	333	0.48
UNCHAHAH III TPS(1 * 210)	210	191.1	204	118	204	19:00	3.74	4	167	0.26
UNCHAHAH IV TPS(1 * 500)	500	308.33	378	267	378	19:00	6.94	6.36	265	-0.58
UNCHAHAH SOLAR(1 * 10)	10	1.79	0	0	0	-	0.04	0.04	2	0
UNCHAHAH TPS(2 * 210)	420	345.22	321	236	321	19:00	6.81	7.22	301	0.41
Sub-Total	12,612	10,563.14	9,350	6,090	-	-	186.66	187.89	7,830	1.23
SJVNL										
NATHPA-JHAKRI HPS(6 * 250)	1,500	999.5	1,083	0	1,098	18:00	6.8	6.89	287	0.09
RAMPUR HEP(6 * 68.67)	412	278.12	294	0	296	18:00	1.88	1.95	81	0.07
Sub-Total	1,912	1,277.62	1,377	0	-	-	8.68	8.84	368	0.16
THDC										
KOTESHWAR HPS(4 * 100)	400	106.88	272	99	272	19:00	2.56	2.63	110	0.07
TEHRI HPS(4 * 250)	1,000	1,064	1,056	0	1,060	17:00	7.5	7.68	320	0.18
Sub-Total	1,400	1,170.88	1,328	99	-	-	10.06	10.31	430	0.25
Total	24,534	17,222.6	17,651	8,459			275.28	278.6	11,612	3.32

IPP/JV

Station/Constituents	Inst. Capacity	Declared Capacity	19:00	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	96	0	107	10:00	0.5	0.53	22	0.03
BUDHIL HPS (IPP)(2 * 35)	70	0	0	0	35	11:00	0.24	0.25	10	0.01
KARCHAM WANGTOO HPS(4 * 250)	1,000	0	900	0	900	18:00	3.56	3.56	148	0
MALANA2(2 * 50)	100	0	0	0	90	09:00	0.25	0.27	11	0.02
SAINJ HEP(2 * 50)	50	0	100	0	100	00:00	0.41	0.44	18	0.03
SHREE CEMENT (IPP) TPS(2 * 150)	300	0	145	123	147	08:00	3.26	3.21	134	-0.05
Sub-Total	1,712	0	1,241	123	-	-	8.22	8.26	343	0.04
Total	1,712	0	1,241	123			8.22	8.26	343	0.04

Summary Section					
	Inst. Capacity	PEAK	OFF-PEAK	Day Energy	Day AVG.
Total State Control Area Generation	54,626	22,695	18,267	524.16	21,840
J. Net Inter Regional Exchange [Import (+ve)/Export (-ve)]		7,148	5,135	143.48	7,793
Total Regional Availability(Gross)	80,872	48,735	31,984	954.5	41,586

Total Hydro Generation					
	Inst. Capacity	PEAK	OFF-PEAK	Day Energy	Day AVG.
Regional Entities Hydro	12,814	8,793	1,232	73.97	3,082
State Control Area Hydro	6,125	1,988	1,432	41.92	1,747
Total Regional Hydro	18,939	10,781	2,664	115.89	4,829

Total Renewable Generation					
	Inst. Capacity	PEAK	OFF-PEAK	Day Energy	Day AVG.
Regional Entities Renewable	30	0	0	0.11	5
State Control Area Renewable	9,214	856	1,286	50.24	2,093
Total Regional Renewable	9,244	856	1,286	50.35	2,098

4(A) INTER-REGIONAL EXCHANGES (Import=(+ve) /Export =(-ve))

SL.No.	Element	19:00	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	159	138	-	640	0	3.84	-3.84
2	132KV-Karmnasa(PG)-Sahupuri(U ..	-	-	-	-	-	-	-
3	132KV-Rihand-Sonnagar(PG)	-	-	-	-	-	-	-
4	220KV-Pusauli(PG)-Sahupuri(UP)	129	68	134	0	2.4	0	2.4
5	400KV-Biharsharif(PG)-Baliala(PG)	110	81	209	0	4.54	0	4.54
6	400KV-Biharsharif(PG)-Varanasi(P..	29	-1	116	55	0.86	0	0.86
7	400KV-Fatehpur(UP)-Sasaram	-	-	-	-	-	-	-
8	400KV-Motihari(DMT)-Gorakhpur ..	324	260	432	0	7.38	0	7.38
9	400KV-Muzaffarpur(PG)-Gorakhp ..	242	228	482	0	8.91	0	8.91
10	400KV-Patna(PG)-Baliala(PG)	618	626	848	0	17.53	0	17.53
11	400KV-Sasaram-Allahabad(PG)	15	34	50	0	0.81	0	0.81
12	400KV-Sasaram-Varanasi(PG)	125	110	131	0	3.87	0	3.87
13	765KV-Fatehpur(PG)-Sasaram.	17	34	249	0	2.75	0	2.75
14	765KV-Gaya(PG)-Baliala(PG)	197	120	252	0	4.27	0	4.27
15	765KV-Gaya(PG)-Varanasi(PG)	179	104	475	0	6.7	0	6.7
16	HVDC800KV-Alipurduar-Agra(PG)	-	-	-	-	-	-	-
Sub-Total EAST REGION		2,144	1,802	3,378	695	60.02	3.84	56.18
Import/Export between NORTH_EAST REGION and NORTH REGION								
1	HVDC800KV-BiswanathCharialli- ..	500	500	0	500	0	11.99	-11.99
Sub-Total NORTH_EAST REGION		500	500	0	500	0	11.99	-11.99
Import/Export between WEST REGION and NORTH REGION								
1	220KV-Auraiya(NT)-Malanpur(PG)	-48	-70	-	104	0	1.68	-1.68
2	220KV-Badod(MP)-Kota(PG)	19	-78	82	115	0	0.44	-0.44
3	220KV-Badod(MP)-Modak(RJ)	-	-	-	-	-	-	-
4	400KV-RAPS C(NP)-Sujalpur	-120	-305	0	308	0	4.14	-4.14
5	400KV-Vindhyachal(PG)-Rihand(N ..	-972	-684	0	491	0	21.68	-21.68
6	400KV-Zerda(PG)-Bhinmal(PG)	112	-154	320	206	1.99	0	1.99
7	400KV-Zerda(PG)-Kankroli(RJ)	1	-222	139	285	0	0.59	-0.59
8	765KV-0rai-Gwalior(PG)	-460	-270	0	628	0	10.34	-10.34
9	765KV-0rai-Jabalpur	209	177	725	-87	8.29	0	8.29
10	765KV-0rai-Satna	1,589	1,307	1,670	0	36.86	0	36.86
11	765KV-Gwalior(PG)-Agra(PG)	2,002	1,320	2,002	0	38.36	0	38.36
12	765KV-Phagi(RJ)-Gwalior(PG)	720	361	1,268	-	17.89	0	17.89
13	HVDC500KV-Mundra(JH)-Mohind..	1,002	1,001	1,004	0	24.24	0	24.24
14	HVDC500KV-Vindhyachal(PG)-Vindhaychal B/B	-250	-250	0	250	0	5.61	-5.61
15	HVDC800KV-Champa(PG)-Kuruku..	700	700	700	0	16.14	0	16.14
Sub-Total WEST REGION		4,504	2,833	7,910	2,300	143.77	44.48	99.29
TOTAL IR EXCHANGE		7,148	5,135	11,288	3,495	203.79	60.31	143.48

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	47.81	-15.87	3.22	35.16	56.18	21.02

NR-WR	152.23	-35.53	-4.57	112.13	99.29	-12.84
Total	200.04	-51.4	-1.35	147.29	143.48	-3.81

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)	-18.5	-24.22	0	30	0	0.5529	-0.5529

5. Frequency Profile

RANGE(Hz)	< 49.2	< 49.7	< 49.8	< 49.9	< 50.0	>= 49.9 - <= 50.05	> 50.05 - <= 50.1	> 50.1 - <= 50.2	> 50.2	> 50.05
%	0	0	.6	11.5	54.7	74.9	11.1	2.5	0	13.6

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

Maximum		Minimum		Average	Freq Variation	Standard	Freq. in 15 mnt blk		Freq Dev Index
Frequency	Time	Frequency	Time				Frequency	Index	
50.17	05:02:50	49.78	16:40:40	49.98	0.048	0.067	50.11	49.83	25.1

6. Voltage Profile: 400kV

STATION	Maximum		Minimum		Voltage (in %)				Voltage Deviation Index (% of time)
	VOLTAGE	TIME	VOLTAGE	TIME	< 380	< 390	> 420	> 430	
Abdullapur(PG) - 400KV	428	02:00	410	10:20	0	0	40.97	0	40.97
Amritsar(PG) - 400KV	426	04:00	407	18:10	0	0	27.43	0	27.43
Ballabgarh(PG) - 400KV	423	04:00	399	10:25	0	0	17.36	0	17.36
Bareilly II(PG) - 400KV	420	02:00	399	11:10	0	0	0	0	0
Bareilly(UP) - 400KV	421	02:00	400	11:10	0	0	.69	0	.69
Baspa(HP) - 400KV	429	00:05	411	18:00	0	0	43.4	0	43.4
Bassi(PG) - 400KV	418	04:00	391	09:25	0	0	0	0	0
Bawana(DTL) - 400KV	427	02:00	407	10:20	0	0	34.38	0	34.38
Dadri HVDC(PG) - 400KV	426	02:00	426	02:00	4.51	4.51	23.61	0	28.12
Gorakhpur(PG) - 400KV	418	02:00	402	06:25	0	0	0	0	0
Hisar(PG) - 400KV	422	04:00	402	10:20	0	0	12.85	0	12.85
Kanpur(PG) - 400KV	422	02:00	404	10:20	0	0	13.54	0	13.54
Kashipur(UT) - 400KV	402	00:00	402	00:00	0	0	0	0	0
Kishenpur(PG) - 400KV	421	04:00	404	18:10	0	0	8.33	0	8.33
Moga(PG) - 400KV	417	04:00	400	10:25	0	0	0	0	0
Nallagarh(PG) - 400KV	429	00:05	411	18:00	0	0	43.4	0	43.4
Rihand HVDC(PG) - 400KV	412	01:20	412	01:20	5.21	5.21	0	0	5.21
Rihand(NT) - 400KV	411	01:25	411	01:25	4.86	4.86	0	0	4.86

6.1 Voltage Profile: 765kV

STATION	Maximum		Minimum		Voltage (in %)				Voltage Deviation Index (% of time)
	VOLTAGE	TIME	VOLTAGE	TIME	< 728	< 742	> 800	> 820	
Anta RS(RJ) - 765KV	788	01:20	764	09:30	0	0	0	0	0
Balia(PG) - 765KV	787	02:00	757	06:25	0	0	0	0	0
Bareilly II(PG) - 765KV	799	02:00	761	10:20	0	0	0	0	0
Bhiwani(PG) - 765KV	796	19:40	763	10:20	0	0	0	0	0
Fatehpur(PG) - 765KV	783	19:40	747	06:10	0	0	0	0	0
Jhatikara(PG) - 765KV	797	02:00	758	10:20	0	0	0	0	0
Lucknow II(PG) - 765KV	796	02:05	761	10:25	0	0	0	0	0
Meerut(PG) - 765KV	798	19:40	756	10:20	0	0	0	0	0
Moga(PG) - 765KV	783	20:00	751	11:35	0	0	0	0	0
Phagi(RJ) - 765KV	794	04:00	758	10:20	0	0	0	0	0
Unnao(UP) - 765KV	767	23:55	748	16:40	0	0	0	0	0

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

State	Off- Peak Hours (03:00)			Peak Hours (19:00)			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	-1,692.21	394.36	0	-1,692.21	0	0	63.29	-40.61	4.6	27.29
HARYANA	-1,046.49	156.54	0	-987.54	141.28	0	91.43	-27.14	1.93	66.23
RAJASTHAN	-98.96	96.3	0	-98.96	-968.8	0	59.3	2.18	-9.6	51.89
DELHI	-772.01	-579.17	0	-622.74	16.75	0	70.15	-18.34	-0.79	51.03
UTTAR PRADESH	18.65	0	0	19.21	68.14	0	121.89	-6.66	1.58	116.81
UTTARAKHAND	635.53	-244.97	0	529.05	109.51	0	11.39	13.74	-0.23	24.9
HIMACHAL PRADESH	443.97	-59.33	0	265.71	178.17	0	12.71	11.21	-2.36	21.56
JAMMU & KASHMIR	608.59	98.59	0	608.59	492.95	0	23.31	14.6	4.43	42.35
CHANDIGARH	0	-25.36	0	0	0	0	3.74	0	-0.41	3.33
TOTAL	-1,902.93	-163.04	0	-1,978.89	38	0	457.21	-51.02	-0.85	405.39

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	3,503.55	2,081.52	-1,692.21	-1,692.21	739.42	-304.29	0	0
HARYANA	4,952.66	2,676.78	-987.54	-1,583.33	171.61	-467.5	0	0
RAJASTHAN	3,783.92	881.86	746.21	-98.96	549.04	-1,716.44	0	0
DELHI	3,659.49	2,080.06	-592.15	-905.03	791.68	-586.27	0	0
UTTAR PRADESH	6,693.73	3,904.52	48.32	-846.84	165.48	-218.04	0	0
UTTARAKHAND	824.06	251.53	636.12	528.46	257.37	-265.31	0	0
HIMACHAL PRADESH	1,168.32	219.49	644.36	265.71	242.24	-551.39	0	0
JAMMU & KASHMIR	1,550.94	695.8	608.59	608.59	542.24	-253.58	0	0
CHANDIGARH	262.3	111.58	0	0	29.28	-91.29	0	0

8. Major Reservoir Particulars

RESERVOIR	Parameters		Present Parameters		LAST YEAR		LAST DAY	
	MDDL (Mts)	FRL (Mts)	Level (Mts)	Energy (MU)	Level (Mts)	Energy (MU)	Inflow (m3/s)	Usage (m3/s)
Bhakra	445.62	513.59	505.8	1,339	500.42	1,114	167.07	435.31
Chamera-I	748.75	760	-	-	-	-	-	0
Gandhisagar	295.78	295.78	-	-	-	-	-	0
Jawahar Sagar	295.78	298.7	-	-	-	-	-	0
Koteshwar	598.5	612.5	610.56	5	610.52	5	174	173.64
Pong	384.05	426.72	416.24	731	411.23	535	65.04	422.15
RPS	343.81	352.8	-	-	-	-	-	0
RSD	487.91	527.91	517.49	3	505.86	3	72.08	119.97
Rihand	252.98	268.22	-	-	-	-	-	0
Tehri	740.04	829.79	815.72	917	812.75	857	49.16	174
TOTAL	-	-	-	2,995	-	2,514	527.35	1,325.07

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 8 in a day)	Maximum number of continuous blocks without sign change
CHANDIGARH	5	31
DELHI	2	26
HARYANA	1	18
HIMACHAL PRADESH	0	12
JAMMU & KASHMIR	3	31
PUNJAB	1	15
RAJASTHAN	2	28
UTTAR PRADESH	1	19
UTTARAKHAND	3	28

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 :

400kV Akal - Kankani -II first time charged at 20:53 hrs of 24.12.2018

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