



ग्रिड कंट्रोलर ऑफ इंडिया लिमिटेड  
(भारत सरकार का उद्यम)  
**GRID CONTROLLER OF INDIA LIMITED**  
(A Government of India Enterprise)



[formerly Power System Operation Corporation Limited (POSOCO)]  
राष्ट्रीय भार प्रेषण केन्द्र / **National Load Despatch Centre**

कार्यालय : बी-9, प्रथम एवं द्वितीय तल, कुतुब इंस्टीट्यूशनल एरिया, कटवारिया सराय, नई दिल्ली - 110016  
Office : 1<sup>st</sup> and 2<sup>nd</sup> Floor, B-9, Qutab Institutional Area, Katwaria Sarai, New Delhi -110016  
CIN : U40105DL2009GOI188682, Website : www.grid-india.in, E-mail : gridindiacc@grid-india.in, Tel.: 011- 42785855

दिनांक : 25<sup>th</sup> April 2023

सेवा मे,

All the Stakeholders

**विषय:** Publishing of Quantum of Reserves for State Control Area in line with Detailed Procedure For Estimation of the Requirement of Secondary Reserve Ancillary Service (SRAS) and Tertiary Reserve Ancillary Service (TRAS) at Regional Level

- संदर्भ:** 1. Central Electricity Regulatory Commission (Ancillary Services) Regulations, 2022  
2. Detailed Procedure for Estimation of the Requirement of Secondary Reserve Ancillary Service (SRAS) and Tertiary Reserve Ancillary Service (TRAS) at Regional Level, as approved by CERC vide letter no. No.RA-14026(11)/3/2019-CERC dated 02<sup>nd</sup> Dec 2022

महोदय,

CERC (Ancillary Services) Regulations, 2022 was notified on 31<sup>st</sup> January, 2022. As per the gazette notification of Hon'ble Commission dated 31<sup>st</sup> October, 2022, the provisions of the requirement of secondary reserve ancillary service (SRAS) and tertiary reserve ancillary service (TRAS) at regional level have been implemented with effect from 05<sup>th</sup> December 2022.

In compliance to regulation 9 (Information Dissemination) of the approved procedure, NLDC (Nodal Agency) is required to publish the requirement of SRAS and TRAS reserves quarterly on the Nodal Agency website. Accordingly, the data available at NLDC has been considered while arriving at the quantum of reserves for SRAS and TRAS. Please find enclosed the following

1. Reserve requirement for Quarter - 2 of 2023-24 (Format – RAS5)
2. Summary of reserve requirement (Format – RAS7).

सधन्यवाद,

भवदीय

(SC Saxena)

Executive Director and Head, NLDC

प्रतिलिपि : Secretary, CERC

Quarter-Ahead SRAS and TRAS Reserve requirement for Quarter 2 (July - September) of Year 2023-24 (Scaled for reference contingency of 4500 MW)																
State/UT	Actual 99 Percentile Negative ACE (MW)	Actual 99 Percentile Positive ACE (MW)	Scaled 99 Percentile Negative ACE (MW) (a)	Scaled 99 Percentile Positive ACE (MW) (b)	Max. Demand met (c)	Internal Gen. at the time of max demand (d)	Drawl from ISTS (e=c-d)	State Internal Generation/ State Maximum Demand (f=d/c)	State drawl from ISTS/ State Maximum Demand (g=e/c)	Secondary Reserves in ISGS (h=a*g)	Secondary Reserves at Regional Level (sum of reserves in all states of the region as given in "h")	Secondary Reserves within state (i=a*f)	Tertiary Reserves in ISGS (j = h)	Tertiary Reserves within state (k = i)	Largest Unit Size of internal generation (l)	Total Tertiary Reserves within state (m=k + 0.5*l)
UT of Chandigarh	47	69	14	23	404	0	404	0.00	1.00	14	590	0	14	0	0	0
Delhi	271	374	80	122	7489	656	6833	0.09	0.91	73		7	73	7	216	115
Haryana	455	470	135	154	12267	3478	8789	0.28	0.72	97		38	97	38	660	368
Himachal Pradesh	209	156	62	51	1797	1496	301	0.83	0.17	10		52	10	52	100	102
UT of Jammu and Kashmir and UT of Ladakh*	438	744	130	243	3176	1022	2154	0.32	0.68	88		42	88	42	150	117
Punjab	352	572	104	187	14281	5918	8363	0.41	0.59	61		43	61	43	700	393
Rajasthan	677	878	201	287	15964	9270	6694	0.58	0.42	84		116	84	116	660	446
Uttar Pradesh	776	846	230	276	26462	12390	14072	0.47	0.53	122		108	122	108	660	438
Uttarakhand	220	211	65	69	2352	886	1466	0.38	0.62	41		25	41	25	76	63
<b>NR state Sum</b>	<b>3445</b>	<b>4319</b>	<b>1021</b>	<b>1411</b>												
<b>Northern Region (NR)</b>	<b>2445</b>	<b>3453</b>	<b>1021</b>	<b>1411</b>												
Chhattisgarh	264	280	119	99	5130	1909	3221	0.37	0.63	75	731	44	75	44	500	294
UT Daman and Diu , UT Dadra and Nagar Haveli#	90	93	41	33	1476	0	1476	0	1	41		0	41	0	0	0
Gujarat	993	1141	448	403	20397	8358	12039	0.41	0.59	264		183	264	183	800	583
Goa	64	56	29	20	567	0	567	0.00	1.00	29		0	29	0	0	0
Madhya Pradesh	587	823	265	291	10781	4371	6410	0.41	0.59	157		107	157	107	660	437
Maharashtra	875	775	394	274	25013	14518	10495	0.58	0.42	165		229	165	229	660	559
<b>WR States Sum</b>	<b>2873</b>	<b>3167</b>	<b>1295</b>	<b>1119</b>												
<b>Western Region (WR)</b>	<b>3101</b>	<b>2738</b>	<b>1295</b>	<b>1119</b>												
Andhra Pradesh	676	637	271	239	11356	7704	3652	0.68	0.32	87	536	184	87	184	800	584
Karnataka	562	592	225	222	11835	6998	4837	0.59	0.41	92		133	92	133	800	533
Kerala	174	225	70	84	3962	1618	2343	0.41	0.59	41		29	41	29	130	94
UT of Puducherry	61	79	25	30	473	0	473	0.00	1.00	25		0	25	0	0	0
Tamil Nadu	845	985	339	369	16461	8373	8088	0.51	0.49	167		172	167	172	600	472
Telangana	616	543	247	203	13076	6484	6591	0.50	0.50	124		122	124	122	800	522
<b>SR State Sum</b>	<b>2935</b>	<b>3060</b>	<b>1176</b>	<b>1147</b>												
<b>Southern Region (SR)</b>	<b>2816</b>	<b>2805</b>	<b>1176</b>	<b>1147</b>												
Bihar	384	376	184	144	6778	475	6303	0.07	0.93	171	412	13	171	13	250	138
Damodar Valley Corporation	388	317	186	121	3710	4676	-966	1.26	-0.26	0		186	0	186	600	486
Jharkhand	196	255	94	98	1729	465	1264	0.27	0.73	68		25	68	25	210	130
Odisha	391	383	187	147	6652	3584	3068	0.54	0.46	86		101	86	101	600	401
Sikkim	37	35	18	14	114	0	114	0.00	1.00	18		0	18	0	0	0
West Bengal	386	373	185	143	9716	6130	3586	0.63	0.37	68		117	68	117	500	367
<b>ER state Sum</b>	<b>1782</b>	<b>1739</b>	<b>853</b>	<b>667</b>												
<b>Eastern Region (ER)</b>	<b>2043</b>	<b>1631</b>	<b>853</b>	<b>667</b>												
Arunanchal Pradesh	41	58	16	20	166	0	166	0.00	1.00	16	134	0	16	0	0	0
Assam	158	192	60	66	2375	323	2052	0.14	0.86	52		8	52	8	50	33
Manipur	33	31	13	11	206	0	206	0.00	1.00	13		0	13	0	0	0
Meghalaya	50	43	19	15	355	0	355	0.00	1.00	19		0	19	0	42	21
Mizoram	22	34	9	12	130	0	130	0.00	1.00	9		0	9	0	6	3
Nagaland	19	26	7	9	172	0	172	0.00	1.00	7		0	7	0	8	4
Tripura	78	68	30	23	387	155	232	0.40	0.60	18		12	18	12	21	22
<b>NER State Sum</b>	<b>401</b>	<b>451</b>	<b>154</b>	<b>156</b>												
<b>North-Eastern Region (NER)</b>	<b>368</b>	<b>382</b>	<b>154</b>	<b>156</b>												
All India	10773	11009	4500	4500							2403	2097	2403	2097		7726
<b>Total Tertiary Reserves Requirement in India</b>											<b>10130</b>					
Note: * UT of Jammu and Kashmir and UT of Ladakh have been considered as single entity inline with data availability at NLDC. # UT Daman and Diu & UT Dadra and Nagar Haveli have been considered as single entity inline with data availability with NLDC.																

Quarter-Ahead ( Jul 2023 - Sep 2023)									
	Secondary Reserves			Tertiary Reserves			Total Reserves (Secondary + Tertiary)		
State/ Union Territory UT	Within in ISGS	Within state	Total	Within in ISGS	Within state	Total	Within in ISGS	Within state	Total
UT of Chandigarh	14	0	14	14	0	14	28	0	28
Delhi	73	7	80	73	115	188	147	122	269
Haryana	97	38	135	97	368	465	193	407	600
Himachal Pradesh	10	52	62	10	102	112	21	153	174
UT of Jammu and Kashmir and UT of Ladakh*	88	42	130	88	117	205	176	159	335
Punjab	61	43	104	61	393	454	122	436	559
Rajasthan	84	116	201	84	446	531	168	563	731
Uttar Pradesh	122	108	230	122	438	560	244	545	790
Uttarakhand	41	25	65	41	63	103	81	87	169
Chhattisgarh	75	44	119	75	294	369	150	339	488
UT Daman and Diu , UT Dadra and Nagar Haveli#	41	0	41	41	0	41	81	0	81
Gujarat	264	183	448	264	583	848	529	767	1296
Goa	29	0	29	29	0	29	57	0	57
Madhya Pradesh	157	107	265	157	437	595	315	545	860
Maharashtra	165	229	394	165	559	724	331	788	1119
Andhra Pradesh	87	184	271	87	584	671	174	768	942
Karnataka	92	133	225	92	533	625	184	666	850
Kerala	41	29	70	41	94	135	83	122	205
UT of Puducherry	25	0	25	25	0	25	49	0	49
Tamil Nadu	167	172	339	167	472	639	333	645	978
Telangana	124	122	247	124	522	647	249	645	894
Bihar	171	13	184	171	138	309	342	151	493
Damodar Valley Corporation	0	186	186	0	486	486	0	671	671
Jharkhand	68	25	94	68	130	199	137	155	292
Odisha	86	101	187	86	401	487	173	502	675
Sikkim	18	0	18	18	0	18	35	0	35
West Bengal	68	117	185	68	367	435	136	483	620
Arunanchal Pradesh	16	0	16	16	0	16	32	0	32
Assam	52	8	60	52	33	85	105	41	146
Manipur	13	0	13	13	0	13	25	0	25
Meghalaya	19	0	19	19	21	40	38	21	59
Mizoram	9	0	9	9	3	12	17	3	20
Nagaland	7	0	7	7	4	11	15	4	19
Tripura	18	12	30	18	22	40	36	34	70
<b>Region-wise and All-India</b>									
Northern Region	590	431	1021	590	2042	2632	1181	2472	3653
Western Region	731	564	1295	731	1874	2605	1463	2438	3901
Southern Region	536	640	1176	536	2205	2741	1072	2846	3918
Eastern Region	412	441	853	412	1521	1933	824	1963	2786
North-Eastern Region	134	20	154	134	84	217	267	104	371
All India	2403	2097	4500	2403	7726	10130	4807	9823	14630

Note:

\* UT of Jammu and Kashmir and UT of Ladakh have been considered as single entity inline with data availability at NLDC.

# UT Daman and Diu &amp; UT Dadra and Nagar Haveli have been considered as single entity inline with data availability with NLDC.