

**CENTRAL ELECTRICITY REGULATORY COMMISSION
NEW DELHI**

Coram:

- 1. Dr. Pramod Deo, Chairperson**
- 2. Shri R.Krishnamoorthy, Member**
- 3. Shri S.Jayaraman, Member**
- 4. Shri. V.S. Verma, Member**

**Petition No. 52/2009
(Suo-motu)**

In the matter of

Maintenance of Grid Discipline – Compliance of provisions of the Indian Electricity Grid Code.

And in the matter of

1. Karnataka Power Transmission Corporation Ltd, Bangalore
2. Smt. G. Latha Krishna Rao
Managing Director,
Karnataka Power Transmission Corporation Ltd, Bangalore
...Respondents

ORDER

In exercise of powers conferred under Section 178 of the Electricity Act, 2003 (the Act), the Central Electricity Regulatory Commission (the Commission) has specified Indian Electricity Grid Code (the Grid Code). Paras 5.4.2(a) and 6.4.4 of the Grid Code enjoin upon the State utilities to endeavor to restrict their net drawal from the grid to their respective drawal schedule whenever the system frequency is below 49.5 Hz. Extracts of relevant paras of the Grid Code are reproduced below:

“5.4.2 Manual Demand Disconnection

(a) As mentioned elsewhere, the constituents shall endeavour to restrict their net drawal from the grid to within their respective drawal schedules whenever the system frequency is below 49.5 Hz. When the frequency falls below 49.0 Hz, requisite load shedding (manual) shall be carried out in the concerned State to curtail the over-drawal.”

6.4 Demarcation of responsibilities

4. Provided that the States, through their SLDCs, shall always endeavour to restrict their net drawal from the grid to within their respective drawal schedules, whenever the system frequency is below 49.5 Hz. When the frequency falls below 49.0 Hz, requisite load shedding shall be carried out in the concerned State(s) to curtail the over-drawal.”

2. In keeping with the above noted provisions of the Grid Code, manual load shedding has to be carried out to curtail over-drawal when the grid frequency falls below 49.0 Hz.

3. It has been reported by Southern Regional Load Despatch Centre (SRLDC) that on a number of occasions during 31.12.2008 to 7.2.2009, the first respondent had over-drawn electricity during a number of time blocks. The necessary details of over-drawal are contained in the **Annexure A** attached. Time blocks during which the first respondent continued to overdraw at frequency of 49.0 Hz or below (though shown as 49 Hz by the Special Energy Meters since these meters record the frequency as 49.0 Hz even when it is below 49.0 Hz) are contained in **Annexure B** attached.

4. The above acts of the first respondent amount to non-compliance of the provisions of the Grid Code.

5. The first respondent is hereby directed to show cause, latest by 31.3.2009, as to why penalty under Section 142 of the Act be not imposed on it for over-drawal separately for each of the time blocks.

6. The second respondent is hereby directed to show cause, latest by 31.3.2009, as to why as a person responsible to the first respondent for conduct of its business should also not be deemed to be guilty of non-compliance of the provisions of the Grid Code along with the first respondent, under Section 149 of the Act, and not punished accordingly.

7. The respondents shall forward copies of their replies to SRLDC. Officer-in-charge of SRLDC or his representative shall assist the Commission in these proceedings.

8. List this petition for further directions on 2.4.2009.

Sd/=	Sd/=	Sd/=	Sd/=
(V.S.VERMA)	(S. JAYARAMAN)	(R. KRISHNAMOORTHY)	(DR. PRAMOD DEO)
MEMBER	MEMBER	MEMBER	CHAIRPERSON

New Delhi, dated 17th March 2009

Annexure A
Over drawl by KPTCL from 31.12.2008 to 07.02.09

Date	No. of time blocks in which KPTCL has under-drawn when frequency was below 49.0 Hz.	Maximum Overdrawl in a time block during the day
31.12.2009	26	298
01.01.2009	14	515
02.01.2009	22	563
03.01.2009	20	290
04.01.2009	6	421
05.01.2009	16	517
06.01.2009	32	300
07.01.2009	32	238
08.01.2009	26	233
09.01.2009	15	285
10.01.2009	22	218
11.01.2009	12	237
12.01.2009	9	196
13.01.2009	2	426
15.01.2009	2	392
16.01.2009	2	326
17.01.2009	1	310
19.01.2009	2	398
20.01.2009	6	177
21.01.2009	20	347
22.01.2009	11	380
23.01.2009	13	458
24.01.2009	5	547
27.01.2009	18	363
28.01.2009	21	391
29.01.2009	10	448
30.01.2009	11	403
31.01.2009	9	343
Total	385	

01.02.2009	18	443
02.02.2009	17	487
03.02.2009	21	402
04.02.2009	14	316
05.02.2009	23	267
06.02.2009	18	234
07.02.2009	20	287
Total	131	

Details of Time block wise Overdrawl by KPTCL when frequency was below 49.0 Hz.during 31.12.2008 to 7.2.2009

31.12.08		01.01.09		02.01.09		03.01.09		06.01.09		07.01.09		08.01.09	
Block	OD (MW)	Block	OD (MW)	Block	OD (MW)	Block	OD (MW)	Block	OD (MW)	Block	OD (MW)	Block	OD (MW)
27	177	29	348	28	88	27	162	23	101	32	34	27	71
28	164	34	206	29	76	28	213	24	91	33	9	28	87
29	275	38	334	30	10	29	290	26	34	34	44	29	125
30	405	39	212	31	63	38	236	28	68	35	57	30	45
32	242	43	116	37	563	39	123	29	16	37	204	31	44
37	298	44	152	42	127	42	47	30	52	38	26	32	93
42	13	45	124	43	78	43	93	31	54	43	45	33	150
43	67	46	75	45	193	45	275	35	166	44	26	34	200
46	42	47	50	46	125	46	168	42	254	45	13	35	167
47	63	48	132	47	112	47	90	43	78	46	70	38	197
50	94	50	102	50	153	48	256	44	45	50	212	42	109
51	130	51	132	51	55	51	226	45	78	51	8	45	28
56	56	57	515	52	99	52	88	46	67	54	36	46	6
57	153	58	354	56	314	54	104	47	93	55	46	47	40
58	56	59	198	57	340	55	156	50	300	56	50	50	93
59	54			58	104	57	157	51	57	57	127	51	25
60	83			62	277	58	105	52	41	58	12	52	37
62	56			66	410	67	60	53	81	60	99	54	181
63	109			67	246	68	45	54	97	61	45	55	110
64	38			70	99	70	85	55	136	62	135	58	81
65	71			71	91			58	83	63	238	59	54

66	52
67	99
74	271
80	94
89	113

75	87
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59	14	64	144	62	58
61	87	66	15	67	162
62	60	67	15	71	233
64	51	74	105	74	148
66	42	81	87	75	96
67	40				
74	166				
78	69				
79	73				
81	115				
83	102				

Details of Time block wise Overdrawl by KPTCL when frequency was below 49.0 Hz.during 31.12.2008 to 7.2.2009

11.01.09		21.01.09		28.01.09		30.01.09		01.02.09		05.02.09		06.02.09		07.02.09	
Block	OD (MW)	Block	OD (MW)	Block	OD (MW)	Block	OD (MW)	Block	OD (MW)	Block	OD (MW)	Block	OD (MW)	Block	OD (MW)
29	237	27	192	28	78	28	253	21	433	21	79	44	36	24	112
31	101	28	126	29	60	30	203	22	417	26	58	46	71	26	159
32	165	29	121	30	210	31	312	23	279	28	63	47	37	27	184
35	30	32	109	39	272	34	214	27	172	31	267	51	49	28	102
38	136	33	94	42	34	38	351	28	153	36	16	52	22	29	73
39	169	38	146	43	69	52	409	29	366	37	40	53	89	30	40
42	20	39	56	44	73	55	315	30	201	38	60	54	56	31	33
43	91	40	29	45	30	58	329	31	27	39	86	55	68	33	53
45	10	42	109	46	60	62	403	32	67	42	47	56	94	34	110
47	46	44	56	47	52	71	327	33	113	45	6	58	128	39	198
51	145	45	58	51	168	75	312	34	105	47	37	62	54	43	102
52	124	47	39	53	70			39	87	50	232	63	67	45	163
		50	153	54	69			44	85	52	50	75	52	47	87
		51	31	55	62			45	73	54	48			52	56
		52	24	56	168			51	12	58	99			54	5
		54	117	58	170			52	29	62	45			55	4
		56	88	59	112			76	286	67	50			59	144
		58	88	61	391					68	8			60	27
		66	347	64	257					81	95			62	32
		67	116	68	268					85	196				
										86	29				
										89	132				

