

# मार्च 2015 March 2015

दक्षिण क्षेत्रीय भार प्रेषण केन्द्र बेंगलूर SOUTHERN REGIONAL LOAD DESPATCH CENTRE

BANGALORE



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# SYSTEM OPERATION REPORT OF SOUTHERN REGION FOR THE MONTH OF MARCH 2015

#### A)SUMMARY REPORT I)IMPORTANT EVENTS

a)COMMISSIONING	OF NEW	CENERA	TING UNIT	S

SL.NO.	STATE/CGS	STATION NAME	CAPACITY (MW)	TYPE	DATE
1		NIL			

#### b)COMMISSIONING OF NEW TRANSMISSION LINES

SL.NO.	CONSTITUENT	LINE NAME & CKT NO.	KV	LENGTH (kM)	DATE
1	PGCIL	400kV Trichy-Nagipattinam 1	400		30.03.15
2	PGCIL 400kV Trichy-Nagipattinam 2				30.0315
3	PGCIL	765kV KARNOOL-TIRUVELLAM 1	765	355	19.03.15
4	PGCIL	PGCIL 765kV KARNOOL-TIRUVELLAM 2		355	20.03.15

c)COMMISSIONING OF NEW SUBSTATIONS

SL.NO.	CONSTITUENT	STATION NAME	KV RATIO	CAPACITY (MVA)	DATE
1	PGCIL	NAGAPATTINAM	765/400	-	30-03-2015

d)COMMISSIONING OF NEW LINE / BUS REACTORS

SL.NO.	CONSTITUENT	STATION/LINE NAME	BUS/LINE	CAPACITY (MVAR)	DATE
1	PGCIL	VIJAYWADA-NELLORE 3	LINE	63	14.03.15
2	PGCIL	VIJAYWADA-NELLORE 4	LINE	63	14.03.15

# II)Schedule Vs Drawal of all Constituents for the month (MU's)

STATE	SCHEDULE	DRAWAL	VARIATION
APTRANSCO	708.87	775.29	66.42
TGTRANSCO	2452.71	2531.51	78.80
KPTCL	839.18	918.23	79.05
KSEB	1272.45	1324.77	52.32
TNEB	3367.48	3381.65	14.17
PONDY	198.38	199.01	0.63
GOA	59.48	57.50	-1.98

#### III) Inter/Intra Regional exchanges in MU's

SCHEDULED INTER REGIONAL AND INTRA REGIONAL EXCHANGES OF POWER DURING MARCH 2015								
TRADER	EXPORTING FROM		IMPORTING TO		WHEELED THROUGH	Total Energy		
	STATE	UTILITY	STATE	UTILITY		Flow (MU)		
GOA	GOASR	GOASR	GOAWR	GOAWR	SR-WR	0.000		
GOASR	GOASR	GOASR	GOAWR	GOAWR	SR-WR	7.880		
GMSUGARLTD	GMSUGAR	KPTCL	APPCC	APTRANSCO	SR-SR	5.776		
GODBIOREF	GODBIOREF	KPTCL	APPCC	APTRANSCO	SR-SR	2.412		
JSWPTC	JSWEL	KPTCL	APPCC	APTRANSCO	SR-SR	85.358		
MANIKARAN	DSCL	KPTCL	APPCC	APTRANSCO	SR-SR	7.192		
MITTAL	CHAMSUGAR	KPTCL	APPCC	APTRANSCO	SR-SR	7.945		
MITTAL	HKMETALIC	KPTCL	APPCC	APTRANSCO	SR-SR	3.215		
MITTAL	ILCIRON	KPTCL	APPCC	APTRANSCO	SR-SR	1.929		
MITTAL	INDCANPOW	KPTCL	APPCC	APTRANSCO	SR-SR	6.752		
NSSKN	NANDI	KPTCL	APPCC	APTRANSCO	SR-SR	5.260		
NVVN	BMMISPAT	KPTCL	APPCC	APTRANSCO	SR-SR	8.290		
PTC	JANKICORP	KPTCL	APPCC	APTRANSCO	SR-SR	1.662		
PTC	MEENAKSHI	SR	APPCC	APTRANSCO	SR-SR	45.153		
PTC	SIL	KPTCL	APPCC	APTRANSCO	SR-SR	8.290		
PTC	SIMHAPURI	SR	APPCC	APTRANSCO	SR-SR	66.987		
TATA	HIMATSINGKA	KPTCL	APPCC	APTRANSCO	SR-SR	2.932		
TATA	STARMETAL	KPTCL	APPCC	APTRANSCO	SR-SR	14.936		
TATA	UGARBELGAM	KPTCL	APPCC	APTRANSCO	SR-SR	7.525		
TATA	UGARGULBARGA	KPTCL	APPCC	APTRANSCO	SR-SR	2.189		

SCHEDULED INTER REGIONAL AND INTRA REGIONAL EXCHANGES OF POWER DURIN							
TRADER	EXPORTING STATE	G FROM UTILITY	IMPORT STATE	ING TO UTILITY	WHEELED THROUGH	Total Energy Flow ( MU )	
INDIACEM	INDCEMVPUR	TGTRANSCO	INDIACEM	APTRANSCO	SR-SR	0.576	
JSWPTC	JSWEL	KPTCL	JSWSMETTUR	TNEB	SR-SR	0.160	
JSWPTC	JSWEL	KPTCL	KSEB	KSEB	SR-SR	58.010	
NVVN	GOASR	GOASR	KSEB	KSEB	SR-SR	0.643	
PTC	SIMHAPURI	SR	KSEB	KSEB	SR-SR	40.048	
МҮНОМЕ	MYHOMEIND	TGTRANSCO	MYHOMEVGU	APTRANSCO	SR-SR	3.054	
COASTGEN	COASTENG	SR	TANGEDCO	TNEB	SR-SR	303.972	
AGARSPONGE	AGARSPONGE	KPTCL	TGPCC	TGTRANSCO	SR-SR	4.368	
HRGALLOYS	HRGALLOYS	KPTCL	TGPCC	TGTRANSCO	SR-SR	4.632	
ILCIRON	ILCIRON	KPTCL	TGPCC	TGTRANSCO	SR-SR	3.000	
JKCEMENT	JKCEMENT	KPTCL	TGPCC	TGTRANSCO	SR-SR	7.884	
JSWPTC	JSWEL	KPTCL	TGPCC	TGTRANSCO	SR-SR	120.274	
NIRANILTD	NIRANISUGAR	KPTCL	TGPCC	TGTRANSCO	SR-SR	12.027	
NVVN	BMMISPAT	KPTCL	TGPCC	TGTRANSCO	SR-SR	12.030	
PTC	JANKICORP	KPTCL	TGPCC	TGTRANSCO	SR-SR	2.403	
PTC	MEENAKSHI	SR	TGPCC	TGTRANSCO	SR-SR	59.033	
PTC	SIL	KPTCL	TGPCC	TGTRANSCO	SR-SR	12.030	
PTC	SIMHAPURI	SR	TGPCC	TGTRANSCO	SR-SR	128.844	
SDKCHIKODI	DKSSKN	KPTCL	TGPCC	TGTRANSCO	SR-SR	10.848	
SHIVASUGAR	SIVASAKTI	KPTCL	TGPCC	TGTRANSCO	SR-SR	5.568	
VIJAYSUG	VIJAYSUGAR	KPTCL	TGPCC	TGTRANSCO	SR-SR	11.160	
IEX	KSEB	KSEB	TSSPDCL	TGTRANSCO	SR-SR	0.050	
SITAPURLTD	SITAPURPOW	TGTRANSCO	ZUARICEMEN	APTRANSCO	SR-SR	5.678	
POWER EXCHANGE							
IEX	IEX		APTRANSCO		HVDC GAZUWAKA, I/C AT	83.033	
IEX	IEX		KPTCL		TALCHER, HVDC AT C'PUR HVDC GAZUWAKA, I/C AT	44.259	
IEX	IEX		KSEB		TALCHER, HVDC AT C'PUR HVDC GAZUWAKA, I/C AT	6.436	
IEX	IEX		TNEB		TALCHER, HVDC AT C'PUR HVDC GAZUWAKA, I/C AT	71.930	
IEX	IEX		MEENAKSHI		TALCHER, HVDC AT C'PUR HVDC GAZUWAKA, I/C AT	0.000	
IEX	APTRANSCO		IEX		TALCHER, HVDC AT C'PUR HVDC GAZUWAKA, I/C AT	-28.796	
IEX	KPTCL		IEX		TALCHER, HVDC AT C'PUR HVDC GAZUWAKA, I/C AT	-162.588	
IEX	KSEB		IEX		TALCHER, HVDC AT C'PUR HVDC GAZUWAKA, I/C AT	-4.019	
IEX	TNEB		IEX		TALCHER, HVDC AT C'PUR HVDC GAZUWAKA, I/C AT	0.000	
	SIMHAPURI				TALCHER, HVDC AT C'PUR HVDC GAZUWAKA, I/C AT		
IEX			IEX		TALCHER, HVDC AT C'PUR HVDC GAZUWAKA, I/C AT	-22.206	
IEX	MEENAKSHI		IEX		TALCHER, HVDC AT C'PUR HVDC GAZUWAKA, I/C AT	-5.789	
PXI	PXI		APTRANSCO		TALCHER, HVDC AT C'PUR HVDC GAZUWAKA, I/C AT	0.000	
PXI	PXI		KPTCL		TALCHER, HVDC AT C'PUR HVDC GAZUWAKA, I/C AT	0.000	
PXI	PXI		KSEB		TALCHER, HVDC AT C'PUR HVDC GAZUWAKA, I/C AT	1.860	
PXI	PXI		TNEB		TALCHER, HVDC AT C'PUR HVDC GAZUWAKA, I/C AT	0.000	
PXI	APTRANSCO		PXI		TALCHER, HVDC AT C'PUR HVDC GAZUWAKA, I/C AT	0.000	
PXI	KPTCL		PXI		TALCHER, HVDC AT C'PUR HVDC GAZUWAKA, I/C AT	0.000	
PXI	KSEB		PXI		TALCHER, HVDC AT C'PUR HVDC GAZUWAKA, I/C AT	0.000	
PXI	TNEB		PXI		TALCHER, HVDC AT C'PUR HVDC GAZUWAKA, I/C AT	0.000	
PXI	SIMHAPURI		PXI		TALCHER, HVDC AT C'PUR HVDC GAZUWAKA, I/C AT	0.000	
PXI	MEENAKSHI		PXI		TALCHER, HVDC AT C'PUR	0.000	
ER-SR INSTINCT	SRPOWERGUJ	GUJARATH	APPCC	APTRANSCO	ER-SR	0.271	
KISPL	JPLSTAGE2	CSEB	APPCC	APTRANSCO	ER-SR	0.809	

			NAL EXCHANGES OF POWER DURING MARCH 2015			
TRADER	EXPORTING FROM STATE UTILITY		IMPORT STATE	TING TO UTILITY	WHEELED THROUGH	Total Energy Flow ( MU )
NVVN	CSPDCL	CSEB	APPCC	APTRANSCO	ER-SR	2.031
NVVN	GRIDCO	ORISSA	APPCC	APTRANSCO	ER-SR	10.157
NVVN	JPLSTAGE2	CSEB	APPCC	APTRANSCO	ER-SR	0.812
NVVN	JPNIGRIE	MPSEB	APPCC	APTRANSCO	ER-SR	0.765
PTC	JPLSTAGE2	CSEB	APPCC	APTRANSCO	ER-SR	1.056
PTC	STERENERGY	ORISSA	APPCC	APTRANSCO	ER-SR	0.265
SCL	SHRECEMTPS	RAJASTHAN	APPCC	APTRANSCO	ER-SR	0.569
STERLITE	STERENERGY	ORISSA	APPCC	APTRANSCO	ER-SR	2.832
	SRPOWERMP	MPSEB		KPTCL		0.782
ESSARPOWER			BESCOM		ER-SR	
GMRETL	BSESRPL	DELHI	KSEB	KSEB	ER-SR	3.285
KISPL	JPLSTAGE2	CSEB	TGPCC	TGTRANSCO	ER-SR	0.945
NVVN	CSPDCL	CSEB	TGPCC	TGTRANSCO	ER-SR	2.374
NVVN	JPLSTAGE2	CSEB	TGPCC	TGTRANSCO	ER-SR	0.949
NVVN	JPNIGRIE	MPSEB	TGPCC	TGTRANSCO	ER-SR	0.894
PTC	JPLSTAGE2	CSEB	TGPCC	TGTRANSCO	ER-SR	1.233
PTC	STERENERGY	ORISSA	TGPCC	TGTRANSCO	ER-SR	0.309
SCL	SHRECEMTPS	RAJASTHAN	TGPCC	TGTRANSCO	ER-SR	0.665
STERLITE	STERENERGY	ORISSA	TGPCC	TGTRANSCO	ER-SR	3.310
VIZAGCARGO	STERENERGY	ORISSA	VIZAGCARGO	APTRANSCO	ER-SR	0.264
MTOA						
M_12_21	JPL	JINDALPOW	WR	TNEB	WR-SR	143.965
M_12_22	NETS	LANCOANPAR	UPPCL	TNEB	NR-SR	72.098
M_12_25	ADANI(E)	APLMUNDRA3	GUJARATH	TNEB	WR-SR	139.322
M_12_29A	KSKMAHANADI	KSKMAHANADI	CSEB	APTRANSCO	WR-SR	123.447
M_12_29T	KSKMAHANADI	KSKMAHANADI	CSEB	TGTRANSCO	WR-SR	143.934
M_14_32	NSLSUGARS	NSLALAND	KPTCL	TGTRANSCO	SR-SR	5.370
M_14_33	NSLSUGARS	NSLKOPPA	KPTCL	TGTRANSCO	SR-SR	4.759
M_14_34	NSLTUNGA	NSLTUNGA	KPTCL	TGTRANSCO	SR-SR	5.825
M_14_35	NSLSUGARS	NSLALAND	KPTCL	APTRANSCO	SR-SR	4.063
M_14_36	NSLSUGARS	NSLKOPPA	KPTCL	APTRANSCO	SR-SR	3.583
M_14_37	NSLTUNGA	NSLTUNGA	KPTCL	APTRANSCO	SR-SR	4.398
M_15_51	NVVN	CSPDCL	CSEB	KSEB	WR-SR	125.635
M_15_52	PTC	BALCO	CSEB	KSEB	WR-SR	19.103

# IV) a) FREQUENCY PROFILE FOR THE MONTH [Hz]

	FREQUENCY (HZ)	DATE	FVI	DATE
MAXIMUM	50.54	01-Mar-2015	0.22	02-Mar-2015
MINIMUM	49.52	03-Mar-2015	0.05	12-Mar-2015
AVERAGE	49.99		0.09	

#### b) FREQUENCY DISTRIBUTION FOR THE MONTH

The frequency ranges as a percentage of time during the month

%TIME FREQUENCY	< 49.7	49.70 - 49.90	49.90-50.05	50.05-50.20	>50.20
% (FROM 17-02-2014)	0.54	17.68	58.86	21.50	1.42

#### V) POWER SUPPLY POSITION FOR THE MONTH

	AP	TG	KAR	KER	TN	PONDY	REGION
UNRESTRICTED PEAK DEMAND(MW)	6794	6943	9893	3716	13695	316	39255
PEAK DEMAND MET (MW)	6784	6755	9549	3602	13051	314	38090
UNRESTRICTED ENERGY REQMT(MU)	4517	4477	6086	2036	8969	199	26283
ENERGY MET (MU)	4511	4375	5927	2021	8668	199	25700

#### **B) DETAILED REPORTS.**

# I. Detailed State wise breakup of installed capacity (MW)

AGENCY	HYDRO	THERMAL	GAS/DIESEL	WIND/OTHERS	NUCLEAR	TOTAL
ANDHRA PRADESH	1759.96	4410.00	272.00	3.00		6444.96
TELANGANA	2083.96	2282.50	0.00	1.00		4367.46
KARNATAKA	3669.45	2720.00	127.92	18.55		6535.92
KERALA	1957.40		191.96	2.03		2151.39
TAMILNADU	2221.90	4770.00	515.88	17.47		7525.25
PONDICHERRY			32.50			32.50
CENTRAL SECTOR		9990.00			2320.00	12310.00
IPP	864.30	6670.00	4695.51	12473.91		24703.72
TOTAL	12556.97	30842.50	5835.77	12515.95	2320.00	64071.19

#### Note:

#### (II) SALIENT FEATURES OF SYSTEM CONDITIONS.

INSTALLED CAPACITY DERATED (MW)	APTRANSCO	TELANGANA	KPTCL	KSEB	TNEB	PONDY	CENTRAL SECTOR	IPP	REGIONAL
Mar-2014	4845	4353	6536	2187	6925	32.5	11810	23281	59970
Mar-2015	6445	4367	6536	2187	7525	32.5	12310	24704	64107
% INCREASE (i)	33.02	0.33	0.00	0.00	8.66	0.00	4.23	6.11	6.90

ENERGY (GROSS) Unrestricted Requirement(MU)	APTRANSCO	TELANGANA	KPTCL	KSEB	TNEB	PONDY	REGIONAL
Mar-2014	4180	4885	6148	2031	8640	192	26076
Mar-2015	4517	4477	6086	2036	8969	199	26283
Energy Availability (MU)							
Mar-2014	3852	4501	5753	2021	8190	192	24508
Mar-2015	4511	4375	5927	2021	8668	199	25700
Shortage(-)/ Surplus(+)							
Mar 2014 (MU) / %	-329 / (-7.86)	-384 / (-7.86)	-395 / (-6.43)	-10 / (-0.49)	-450 / (-5.21)	0 / (-0.07)	-1568 / (-6.01)
Mar 2015 (MU) / %	-6 / (-0.14)	-102 / (-2.28)	-159 / (-2.60)	-15 / (-0.74)	-301 / (-3.36)	0 / (-0.04)	-583 / (-2.22)

DEMAND Unrestricted Demand (MW)	APTRANSCO	TELANGANA	KPTCL	KSEB	TNEB	PONDY	REGIONAL
Mar-2014	6304	7367	9559	3575	12969	320	37831
Mar-2015	6794	6943	9893	3716	13695	316	39255
Availability (MW)							
Mar-2014	6069	7093	9168	3588	12650	319	36985
Mar-2015	6784	6755	9549	3602	13051	314	38090
Shortage(-)/ Surplus(+)							
Mar 2014 (MW) / %	-235 / (-3.72)	-274 / (-3.72)	-391 / (-4.09)	14 / -(-0.38)	-319 / (-2.46)	-1 / (-0.34)	-846 / (-2.24)
Mar 2015 (MW) / %	-10 / (-0.15)	-188 / (-2.70)	-344 / (-3.47)	-113 / (-3.05)	-644 / (-4.70)	-2 / (-0.58)	-1165 / (-2.97)

#### **III)VOLTAGE PROFILE**

#### MAXIMUM AND MINIMUM VOLTAGES (KV) AND VOLTAGE RANGE (PERCENTAGE)

STATION	MAXIMUM	MINIMUM	< 360	360 - 380	380 - 420	>420
RAMAGUNDAM	419	403	0.00	0.00	100.00	0.00
HYDERABAD	424	401	0.00	0.00	97.77	2.23
BANGALORE	415	379	0.00	0.57	99.43	0.00
MADRAS	429	406	0.00	0.00	66.32	33.68
NEYVELI	412	398	0.00	0.00	100.00	0.00

i). NTPC's 1000MW capacity at Simhadri, 359.58MW capacity at Kayamkulam and NLC's 600MW capacity at Neyveli Stage I are fully dedicated to Andhra Pradesh, Kerala & Tamil Nadu respectively have been included under the IPPs of respective States.

ii). Nellore TPS (1 x 30 MW) in Andhra Pradesh permanently closed from 23.04.2005.

<sup>\*</sup> The Installed Capacity is reconciled with the data received from states

# IV)PERFORMANCE OF CONSTITUENTS

# ENERGY GENERATED BY GENERATING STATIONS / UNITS IN SOUTHERN REGION DURING March 2015

#### **ANDHRA PRADESH**

01.110	OTATION.	FFFFOTN/F INOTALLE	- D O 4 D 4 O I T	27 (2000)	ENERGY GI	ENERATION
SL.NO.	STATION	EFFECTIVE INSTALLE	D CAPACII	Y (IVIVV)	Mar-15	From 01-04-14 To 31-03-2015
HYDRO						10 01 00 201
	MACHKUND	3x(23+17)x70%	=	84.00	30.77	294.18
1	T.B.DAM	(8x9)x80%	=	57.60	11.69	148.91
	UPPER SILERU	4x60	_	240.00	79.58	524.95
	DONKARAYI	1x25	=	25.00	14.72	136.30
5	LOWER SILERU	4x115	_	460.00	134.18	1297.04
3	SRISAILAM RBPH	7x110	=	770.00	46.05	1160.52
,	NSR RT.CANAL.P.H	3x30	=	90.00	0.00	186.66
3	PENNA AHOBILAM	2x10	=	20.00	1.59	16.26
)	MINI HYDEL (+ APTRIPCO 1.2 MW)	13.36		13.36	0.76	14.62
	TOTAL	10.00		1759.96	319.35	3779.44
THERMAL					0.0.00	
COAL	=					
<u> </u>	VIJAYAWADA	6x210 + 1x500	=	1760.00	1192.65	12786.02
)	RAYALASEEMA	5x210	=	1050.00	710.19	7044.31
- ?	KRISHNAPATNAM	2x800 \$	=	1600.00	269.87	1503.11
,	TOTAL	Σλουο ψ		4410.00	2172.71	21333.44
GAS/NAP	THA/DIESEL			4410.00		
1	VIJJESWARAM STAGE 1 (GAS)	2x33+1x34	=	100.00	0.00	4.21
)	VIJJESWARAM STAGE 2 (GAS)	1x112.5+1x59.5	=	172.00	90.65	656.46
<u>-                                      </u>	TOTAL	17112.0+1700.0		272.00	90.65	660.67
WIND/SOL				272.00		
1	WIND	2		2.00	0.00	0.00
<u> </u>	SOLAR JURALA	1	=	1.00	0.00	0.00
	TOTAL	<del> </del>		3.00	0.00	0.00
IPP HYDRO 1	MINI HYDRO	105.64	=	105.64	20.00	283.69
COAL						
1	SIMHADRI (AP) - NTPC	2x500	=	1000.00	719.70	7646.38
2	TPCIL	1x660	=	660.00	0.00	0.00
3	CAPTIVE POWER PLANTS	0	=	0.00	47.00	783.37
GAS/NAPTI	HA/DIESEL					
ı	JEGURUPADU (GAS)	2x45.8+1x48.9+1x75.5	=	216.82	91.19	574.34
2	GVK EXTENSION(GAS)	1x145+1x75	=	220.00	0.00	0.00
3	SPECTRUM (GAS)	1x46.8+2x46.1+1x68.88	=	208.31	59.71	528.13
1	LANCO (GAS)	2x115+1x125	=	351.49	37.20	559.26
5	ISOLATED GAS WELL (GAS) (LVS)	27.04	=	27.04	6.00	60.00
<u> </u>	RELIANCE ENERGY LTD. (GAS)	1x140+1x80	=	220.00	0.00	163.49
7	VEMAGIRI POWER GENERATION LTD.(GAS)	1x233+1x137	_	370.00	0.00	0.00
 3	GAUTAMI CCPP	2x145 + 1x174		464.00	0.00	0.00
)	KONASEEMA CCPP	145.9911+140.0899+165		444.08	0.00	0.00
10	GMR (BARG)	237	=	237.00	0.00	0.00
	LAR / OTHERS	201		237.00		
	WINDMILL	428.09	=	428.09	94.06	1545.20
 !	SOLAR (Cuddapah, Ananthpur, MehboobNagar,Chittoor)	22.75	=	22.75	11.82	158.76
	RCL	44				
	IRIJ	41	=	41.00	28.00	311.00
3		the state of the s				
	BAGASSE+BIOMASS+WASTE BASED PP+CO-GENERATION (NC)	274.8+29.25	=	304.05	273.87	3070.87
	BAGASSE+BIOMASS+WASTE BASED	274.8+29.25 78.79	=	304.05 78.79	0.00	3070.87 10.64
3	BAGASSE+BIOMASS+WASTE BASED PP+CO-GENERATION (NC)					

Note: Simhadri (NTPC) of 1000 MW capacity Coal based plant, fully dedicated to Andhra Pradesh has been included.

#### **TELANGANA**

					ENERGY GENERATION		
SL.NO.	STATION	EFFECTIVE INSTA	LLED CAPACIT	Y (MW)	Mar-15	From 01-04-14 To 31-03-2015	
<b>HYDRO</b>							
1	SRISAILAM LBPH	6x150	=	900.00	79.20	1811.64	
2	N'SAGAR	1x110+7x100.8	=	815.60	24.09	1038.04	
3	NSR LT.CANAL.P.H	2x30	=	60.00	0.00	42.07	
4	NIZAMSAGAR	2x5	=	10.00	0.00	7.09	
5	POCHAMPAD	4x9	=	36.00	0.19	13.11	
6	SINGUR	2x7.5	=	15.00	0.39	5.39	
7	JURALA	6x39	=	234.00	0.00	122.79	
8	MINI HYDEL	13.36	=	13.36	0.00	0.00	
	TOTAL			2083.96	103.87	3040.13	

5

THERMAL						
THERMAL	<u>.</u>					
COAL						
1	RAMAGUNDAM-B	1x62.5	=	62.50	0.00	193.40
2	KOTHAGUDEM-A	4x60	=	240.00	159.67	1586.20
3	KOTHAGUDEM-B	2x120	=	240.00	149.94	1530.64
4	KOTHAGUDEM-C	2x120	=	240.00	155.46	1261.74
5	KOTHAGUDEM-D	2x250	=	500.00	379.24	3442.36
6	KOTHAGUDEM ST VI	1x500	=	500.00	380.59	4032.65
7	KAKATIYA TPP 1	1x500	=	500.00	336.31	4232.76
/		1X000	=			
	TOTAL			2282.50	1561.22	16279.74
WIND/SOL						
1	SOLAR JURALA	1	=	1.00	30.00	57.00
	TOTAL			1.00	30.00	57.00
<u>IPP</u>						
HYDRO						
1	MINI HYDRO	0	=	0.00	0.00	57.00
COAL	WIINTTTDTO			0.00	0.00	07.00
COAL					450.00	4000.70
2	CAPTIVE POWER PLANTS	0	=	0.00	150.00	1882.76
WIND / SOL	AR / OTHERS					
1	SOLAR RAMAGUNDAM NTPC	10	=	10.00	1.38	42.90
	BAGASSE+BIOMASS+WASTE BASED	205.25+53.76		259.01	200.72	2054.40
2	PP+CO-GENERATION (NC)	205.25+55.76	=	259.01	200.72	2054.40
	TOTAL			269.01	352.10	4037.06
	TOTAL TELANGANA			4636.470	2047.19	23413.93
KARNAT					20	
					ENERGY GE	NERATION
SL.NO.	STATION	EFFECTIVE INSTALLE	D CAPACITY (N	IW)	ENERGY GE	From 01-04-14
SL.NO.	STATION	LITEOTIVE INSTALLE	D CAPACITI (II	100)	Mar-15	To 31-03-2015
HYDRO						10 01 00-2010
D.K.O	CHARAVATH.	40,400.5		4000	600.00	FOEE 47
1	SHARAVATHI	10x103.5	=	1035.00	609.92	5255.47
2	LINGANAMAKKI.P.H.	2x27.5	=	55.00	28.43	256.26
3	JOG (MGHES)	4x21.6+4x13.2	=	139.20	36.86	346.89
4	NAGJHERI	1x135+5x150	=	885.00	367.16	3255.43
5	SUPA	2x50	=	100.00	70.68	453.30
6	VARAHI	4x115	=	460.00	104.42	1139.28
7	BHADRA POWER HOUSE	1x7+2x12.1+1x2+6		39.20	6.91	50.58
0	SIVANSAMUDRAM	6x3+4x6	=	42.00	8.71	222.00
0					3.26	86.64
9	SHIMSHA	2x8.6	=	17.20		
10	MUNIRABAD	1x10 + 3x9	=	28.00	1.65	107.20
11	T.B.DAM SHARE (20 %)	8x9(20%)	=	14.40	2.94	41.90
12	GHATAPRABHA	2x16	=	32.00	1.47	66.03
13	MANI DAM.P.H.	2x4.5	=	9.00	3.70	29.25
14	MINI HYDRO	1.4+0.35+2.7	=	4.45	0.00	0.00
15	MALLAPUR	2x4.5	=	9.00	0.00	0.00
16	KADRA	3x50	_	150.00	30.77	405.12
17	KODASALLI	3x40	=	120.00	40.40	385.76
18	SHARAVATHI TAIL RACE	4x60		240.00	59.17	556.59
			=		2.46	483.01
19	ALMATTI	1x15+5x55	=	290.00		
	TOTAL			3669.45	1378.89	13140.71
THERMAL	•					
COAL						
1	RAICHUR.T.PS.	7x210 +1x250	=	1720.00	1134.69	10979.44
2	BELLARY TPS	2x 500	=	1000.00	612.47	5807.08
	TOTAL			2720.00	1747.15	16786.52
GAS/NAPT	THA/DIESEL			2720.00	1747.13	13100.32
, CAOMAP		0.01.05			0.00	0.00
1	YELEHANKA (DIESEL)	6x21.32	=	127.92	0.00	0.00
	TOTAL			127.92	0.00	0.00
WIND						
1	KAPPATAGUDDA	4.55	=	4.55	0.34	9.67
2	SOLAR	9+5	=	14.00	1.78	15.28
	TOTAL				2.11	24.95
IPP	IOINE			18.55	2.11	24.50
<del></del>						
HYDRO					•	
1	MINI HYDEL	702.66	=	702.66	0.00	0.00
COAL						
1	UPCL(THERMAL)	2x600	=	1200.00	588.81	6025.70
2	JINDAL (COAL & COREX)	2x130+4x300	=	1460.00	325.68	4419.89
GAS/NAPTI						
1	TATA ELECTRIC (DIESEL)	5x16.26	=	81.30	0.00	0.00
2				27.80	0.00	0.00
	RAYAL SEEMA ALKALIES (DIESEL)	3x12	=			0.00
3	ITPL (DIESEL)	9	=	9.00	0.00	0.00
WIND / SOL	AR / OTHERS					
1	WIND MILL & SOLAR	2157.965	=	2157.97	0.00	2.22
2	CO-GENERATION	952.66	=	952.66	692.83	8116.85
3	BIO-MASS	88.5	=	88.50	0.00	0.00
	TOTAL			6679.89	1607.32	18564.66
	TOTAL KARNATAKA					
	TO TAL NATINATANA			13215.805	4735.48	48516.84

					ENERGY GENERATION		
SL.NO.	STATION	EFFECTIVE INSTALLED C	APACITY (M)	N)	Mar-15	From 01-04-14 To 31-03-2015	
HYDRO						10 31-03-2015	
1	KUTTIADI + EXTENTION + ADDL. EXTN.	3x25 + 50 +50+50	=	225.00	61.94	738.31	
2	SHOLAYAR	3x18		54.00	32.96	238.23	
3	PORINGALKUTHU	4x8		32.00	6.13	151.00	
4	PORIG. L. BANK	16	=	16.00	9.50	107.49	
5	PALLIVASAL	3x7.5+3x5		37.50	18.04	211.59	
6	SENGULAM	4x12		48.00	9.66	151.36	
7	PANNIAR	2x16		32.00	13.79	154.90	
0	NERIAMANGALAM + EXTENSION	3x17.5 +25		77.50	19.07	343.29	
o o	SABARIGIRI	1x60 + 4x55		280.00	160.00	1224.72	
10	IDUKKI	3x130+3x130		780.00	238.23	2494.09	
					42.65	372.66	
11	IDAMALAYAR KALLADA	2x37.5 2x7.5	=	75.00 15.00	7.74	67.17	
13	PEPPARA	3	=	3.00	0.41	5.35	
14	MADUPETTY	2		2.00	0.72	3.81	
15	MALAMPUZHA	1x2.5	=	2.50	0.00	5.07	
16	L.PERIYAR	3x60		180.00	18.55	577.30	
17	KAKKAD	2x25		50.00	21.13	192.93	
18	CHEMBUKADAVU	1x2.7+1x3.75	=	6.45	0.00	11.31	
19	URUMI	1 x 3.75 + 1 x 2.4		6.15	0.00	13.29	
20	MALANKARA	3 x 3.5		10.50	3.07	33.76	
21	LOWER MEENMUTTY	2x1.5 + 1x0.5		3.50	0.12	5.76	
22	KUTTIADI TAIL RACE	3 x 1.25		3.75	0.91	7.86	
					0.00	15.45	
23	POOZHITHODE RANIPERUNADU	3 x 1.60 2 x 2	=	4.80 4.00	0.82	7.90	
			=		0.01	9.35	
25	VILANGAD PEECHI	3x2.5	=	7.50 1.25	0.37	1.90	
26	TOTAL	1 x 1.25	=	1957.40	665.81	7145.84	
GAS/NAP1	THA/DIESEL						
1	BRAHMAPURAM DGPP (DIESEL)	3x21.32	=	63.96	1.16	8.41	
2	KOZHIKODE DPP (DIESEL)	8x16	=	128.00	10.88	199.27	
	TOTAL	OX10		191.96	12.05	207.69	
WIND				101.00	12.00	207.00	
1	WIND MILL	2.025	=	2.03	0.03	1.29	
	TOTAL	2.023		2.03	0.03	1.29	
IPP	TOTAL			2.03	0.03	1.23	
HYDRO							
1	MANIYAR	3x4		12.00	2.45	33.95	
2	KUTHUNGAL	3x7	=	21.00	7.29	45.98	
3	ULLUNGAL	2x3.5			1.63	21.08	
-			=	7.00	0.38	24.34	
4	IRUTTUKANAM	1x3	=	3.00	2.07	26.80	
5	KARIKKAYAM	3 x 3.5	=	10.50			
6 GAS/NAPTI	MEENVALLAM	1 x 2.5	=	2.50	0.09	3.80	
1	RGCCPP,KAYAMKULAM (KSEB) - NTPC	2x116.6(GT)+1x126.38(ST)		359.58	0.00	819.13	
2	BSES (NAPTHA)	3x40.5(GT)+1x35.5(ST)	=	157.00	0.00	149.18	
3	KASARGODE (DIESEL)	3x7.31	<u> </u>	21.93	0.00	0.00	
4	MPS STEEL CASTINGS	1x10			0.00	28.08	
WIND/OTHE		11/10	=	10.00	0.00	20.00	
1	AGALI	31 x 0.6	=	18.60	0.35	30.37	
2	RAMAKKELMEDU	19 X 0.75	=	14.25	0.54	27.49	
3	PCBL Co-Generation	10	=	10.00	3.17	32.11	
	TOTAL	10		647.36	17.98	1242.31	
	TOTAL KERALA						
	TOTAL KENALA			2798.745	695.87	8597.12	

Note: RGCCPP, Kayamkulam (NTPC) of 359.58 MW capacity Naptha based plant, fully dedicated to Kerala has been included.

#### **TAMILNADU**

TAMILNA	טע				ENERGY	NEDATION
SL.NO.	STATION	EFFECTIVE INSTALLED C	APACITY (M	W)	ENERGY GI	From 01-04-14
			,		Mar-15	To 31-03-2015
<u>HYDRO</u>						
1	PYKARA	3x6.65+1x11+2x14	=	58.95	3.38	39.00
2	PYKARA MICRO	1x2	=	2.00	0.97	7.30
3	PYKARA ULTIMATE (PUSHEP)	3x50	=	150.00	50.46	367.01
<u>4</u>	MOYAR	3x12	=	36.00	19.44 0.01	144.72 0.55
<u>5</u>	MARAVAKANDI KUNDAH-I	1x0.75 3x20	=	0.75 60.00	34.36	258.03
7	KUNDAH-II	5x35	=	175.00	78.43	653.70
8	KUNDAH-III	3x60		180.00	44.80	390.21
9	KUNDAH-IV	2x50	=	100.00	5.78	156.86
10	KUNDAH-V	2x20	=	40.00	9.39	93.48
11	SURULIYAR	1x35	=	35.00	8.44	103.42
12	KADAMPARAI	4x100	=	400.00	46.97	502.47
13	ALIYAR	1x60	=	60.00	9.24	154.27
14	POONACHI	1x2	=	2.00	0.05	3.26
15	METTUR DAM	4x12.5	=	50.00	5.01	106.98
16	METTUR TUNNEL	4x50	=	200.00	0.00	335.63
<u>TAMILNA</u>	<u>DU</u>					
SL.NO.	STATION	EFFECTIVE INSTALLED C	ADACITY (MI)	M/\	ENERGY GI	From 01-04-14
SL.NO.	STATION	LITEOTIVE INSTALLED C	AFACITI (IVI	•••	Mar-15	To 31-03-2015
17	LOWER METTUR BARRIAGE - 1 TO 4	8x15	=	120.00	4.54	266.59
18	BHAVANISAGAR MICRO	4x2	=	8.00	4.12	31.51
19	PERIYAR	4x35	=	140.00	9.00	517.45
20	VAIGAI	2x3	=	6.00	0.00	15.63
21	PAPANASAM	4x8	=	32.00	5.80	118.22
22	SERVALAR	1x20	=	20.00	1.72	38.61
23	SARKARAPATHY	1x30	=	30.00	17.63	134.23
24	SHOLAYAR	2x35+25	=	95.00	2.96	261.36
25	KODAYAR	1x60+1x40	=	100.00	17.35	201.99
26 27	LOWER BHAVANISAGAR SATHANUR DAM PH	2X4 1x7.5	=	8.00 7.50	0.92	18.97 1.03
28	KUNDAH-VI (Parson Valley)	1x30	=	30.00	10.66	34.83
29	MICRO TOTAL	0.70+1.95+2.5+4+1.3+5.25	=	15.70	1.06	105.36
30	BHAVANI KATTALAI BARRAGE - I & II	4x15	=	60.00	0.52	195.07
THERMAL	TOTAL			2221.90	392.96	5257.75
COAL/LIGNI	TE					
2	ENNORE.T.P.S	2x60+3x110	=	450.00	79.64	604.83
3	TUTUCORIN.T.P.S	5x210	=	1050.00	731.96	7673.24
4	METTUR.T.P.S	4x210 + 1x600	=	1440.00	965.75	9255.30
5	NORTH CHENNAI T.P.S	3x210 + 2x600	=	1830.00	985.96	9842.27
CACINADT	TOTAL			4770.00	2763.31	27375.64
GAS/NAPI	HA/DIESEL  PACIN PRIDCE (MARTILA)	4,,00		100.00	0.52	2.97
2	BASIN BRIDGE (NAPTHA)  KOVIL KALAPPAL (GAS)	4x30 1x70+1x37.88	=	120.00 107.88	38.99	413.71
3	VALATHUR (GAS) STG1	1x60+1x35	=	95.00	66.78	700.58
4	VALATHUR (GAS) STG2	1 x 60 + 1 x 32	=	92.00	0.00	380.31
5	KUTTALAM (GAS)	1x64+1x37	=	101.00	60.20	497.36
	TOTAL			515.88	166.49	1994.93
WIND / SO	<del></del>					
1	TNEB WIND MILL	17.465	=	17.47	0.00	0.00
IPP	TOTAL			17.47	0.00	0.00
LIGNITE/THI	ERMAL					
1	NEYVELI-I (TN) - NLC	6x50+3x100	=	600.00	375.57	3578.04
2	ST - CMS	250	=	250.00	154.34	1668.92
3	COASTAL ENERGY	1x600	=	600.00	309.25	917.19
GAS/NAPTH						
1	GMR POWER (DIESEL)	4x49	=	196.00	0.00	575.98
2	SAMALPATTY (DIESEL)	7x15.1	=	105.66	2.60	224.09 243.81
3 4	MADURAI POWER CL (DIESEL) P P NALLUR (NAPTHA)	106 330.5	=	106.00 330.50	-0.50	1143.39
5	ABAN POWER (GAS)	74.41+38.81	= =	113.20	70.15	560.35
6	ARKEY ENERGY(PENNA)(GAS)	1x38 + 2x6.8 + 1x20		52.80	24.77	378.09
	AR / OTHERS					
1	WIND MILL *	7234.445	=	7234.45	150.89	9520.71
2	SOLAR	17.000	=	17.00	1.10	11.93
3	CO-GENERATION  BIO MASS & CDD	659.40	=	659.40	1249.831	12939.80
4	BIO-MASS & CPP	177.4	=	177.40 <b>10442.41</b>	2342.66	31762.31
	TOTAL TAMIL NADU			17967.65	5665.42	66390.62
Nata Nassali I (	NLC) of 600 MW capacity Lignite based plant, fully de	diseased as Transit Manda base has a facility of			50001-TE	

TOTAL TAMIL NADU

17967

Note: Neyveli-I (NLC) of 600 MW capacity Lignite based plant, fully dedicated to Tamil Nadu has been included under Central Sector.

#### **PONDICHERRY**

					ENERGY GENERATION		
SL.NO.	STATION	EFFECTIVE INSTALLED CAP	PACITY (MV	N)	Mar-15	From 01-04-1	
CAS/NAD	THA/DIESEL					To 31-03-201	
GAS/NAP	KARAIKAL POWER PLANT (GAS)	22.9 + 9.6	=	32.50	0.00	111.90	
	TOTAL	22.3 + 3.0		32.50	0.00	111.90	
	70112				0.00	111.90	
	TOTAL PONDICHERRY			32.50	0.00	111.90	
	ER OPEN ACCESS						
GAS/NAP	THA/DIESEL						
1	LANCO KONDAPPILLI POWER LTD.	233 + 133	=	366.00	0.00	0.00	
2	SIMHAPURI ENERGY PVT LTD	4 x 150	=	600.00	3.45	2920.89	
3	MEENAKSHI ENERGY PVT LTD	2 x 150	=	300.00	125.90	1483.53	
	TOTAL			1266.00	129.35	4404.42	
	TOTAL IPP UNDER OPEN ACCESS			1266.00	129.35	4404.42	
CENTRA	L SECTOR						
					ENERGY G	ENERATION	
SL.NO.	STATION	EFFECTIVE INSTALLED CAPACITY (MW)				From 01-04-1	
		` '		Mar-15	To 31-03-201		
THERMAL	<u>.</u>			Ť			
COAL							
1	RAMAGUNDAM T.P.S (ISGS) - NTPC	3x200+4x500	=	2600	1918.40	20443.11	
2	TALCHER STAGE II (ISGS) - NTPC	4x500	=	2000	1488.79	16210.57	
3	SIMHADRI STAGE - II - NTPC	2x500	=	1000	705.89	7294.97	
4	VALLUR TPS - NTPC	3x500	=	1500	650.03	5748.68	
5	NTPL	1X500	=	500	0.00	0.00	
LIGNITE							
5	NEYVELI-II (ISGS) - NLC	7x210	=	1470	1068.66	11131.40	
6	NEYVELI TPS-I (Expansion) (ISGS) - NLC	2x210	=	420	314.70	3385.04	
7	NEYVELI TPS-II (Expansion) (ISGS) - NLC	2 x 250	=	500	33.57	133.22	
	TOTAL			9990.00	6180.02	64346.99	
NUCLEAR	<u> </u>						
1	M.A.P.S KALPAKAM (ISGS) - NPC	2x220	=	440.00	291.71	2616.61	
2	KAIGA A.P.S (ISGS) - NPC	4x220	=	880.00	570.12	6462.19	
3	KUDANKULAM A.P.S (ISGS) - NPC \$	1x1000 \$	=	1000.00	744.68	4286.55	
	TOTAL			2320.00	1606.52	13365.36	
	TOTAL CENTRAL SECTOR			12310.00	7786.54	77712.35	
	GRAND TOTAL			64071.19	25031.09	270615.84	

#### V) RESERVOIR PARTICULARS

NAME OF								
RESERVOIR	MDDL (M)	FRL (M)	LEVEL	. (M)	ENERG	Y (MU's)	INFLOWS	
	WIDDL (W)	FRL (W)	As on 1 st As on 31th		As on 1 st As on 31th			
JALAPUT	818.39	838.40	833.83	832.20	346.00	295.00	22.75	
LINGANAMAKKI	522.70	554.50	545.49	541.78	2178.00	1520.00	12.02	
SUPA	495.00	564.00	546.78	542.30	1765.00	1483.00	38.21	
IDDUKKI	694.90	732.40	721.11	717.78	1314.00	1096.00	24.02	
KAKKI	908.30	981.50	971.53	965.07	587.00	438.00	14.57	
NILGIRIS			0.00	0.00	944.00	716.00	28.49	

#### VI) BRIEF DESCRIPTION OF GRID DISTURBANCES:-

S.NO.	ELEMENT NAME	Date Of tripping	Time Of tripping	Date & Time of Restoration	Brief details
1	Complete outage of Upper sileru power station of APGENCO	04-Mar-15	08:00:00		During de-synchronizing of Unit-4 at Upper sileru station, breaker was under stuck condition. The LBB protection got operated from P.D relay when breaker was opened and as B-pole breaker was under lockout. 220kV Upper sileru station is on a single bus operation.
2	Complete outage of 220kV Ambewadi substation of KPTCL	12-Mar-15	07:51:00	12-03-2015 at 15:23 hrs	fault occurred in 220kV Ambewadi-Nagjheri line-2. Breaker was under lockout due to CB low air pressure at Ambewadi end. LBB and bus bar protection are not healthy at Ambewadi. This led to tripping of lines from remote ends and ICT on operation of back up protection inorder to clear the fault
3	Complete outage of Srisailam left bank hydro power station	20-Mar-15	11:22:00	20-03-2015 at 18:30 hrs	High resistance fault had occurred in GIS at Srisailam left bank station. This fault was sensed by residual over current protection provided in distance relay of 400kV lines at Srisailam which in-turn led to tripping of the line breakers of all 400kV lines at srisailam.
4	Complete outage of 220 kV Tadikonda substation of APTRANSCO	22-Mar-15	19:31:00	22-03-2015 at 20:13 hrs	Failure of B-phase CT of 100MVA ICT-1 at Tadikonda. 220kV Tadikonda-VTPS-1&2 and ICT-2,3&4 tripped due to mal-operation of protection system.

#### VI) BRIEF DESCRIPTION OF GRID INCIDENCES:-

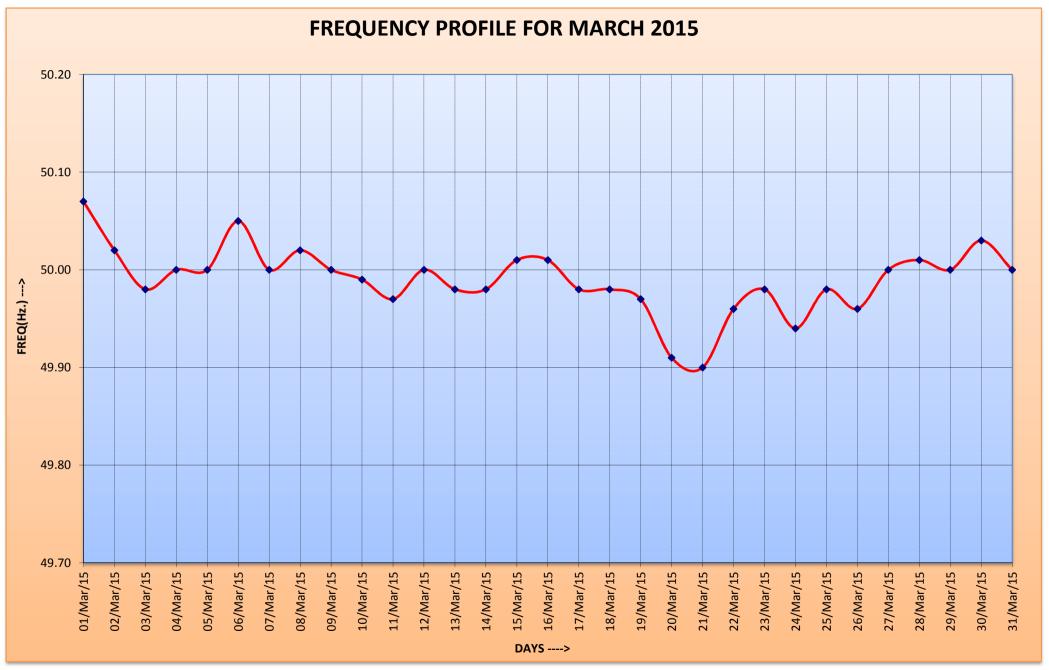
/	THE BESON HONOR OF GIRLD INCODENCES.					
s.no.	ELEMENT NAME	Date & Time of tripping	Date & Time of Restoration	Load Loss	Brief details	
1	Tripping of 400/220kV ICT1-&2 at Thrissur substation of KSEB	03-03-2015 @ 17:02Hrs	03-03-2015 @ 17:54Hrs	load loss : 350MW	During testing of LBB protection got activated and this resulted in tripping of ICT-1&2	
2	Tripping of Unit-4&6 at JSW power station and tripping of 400/220kV ICT-2 at Munirabad	08-03-2015 @ 19:41Hrs	08-03-2015 @ 20:52Hrs	Gen loss : 600 MW	Failure of L.A in 220kV Lingapur-Munirbad line-2 at lingapur end.  Delayed clearance of fault from Munirabad(KPTCL) end. Units at JSW tripped due to tripping of evacuating lines on 220kV side, tripping of 220kV bus coupler breaker and due to tripping of station utility transformer	

10

3	Multiple tripping at Raichur TPS of KPCL: 400kV Raichur TPS-Raichur(PG) line-1&2, 400kV Raichur-Mahboobnagar, Unit#7 at RTPS	09-03-2015 @ 6:36Hrs	09-03-2015 @ 7:55Hrs	Gen loss :200 MW	B phase to earth fault had occurred in 400kV kalchur TPS-kalchur line- 1 and line tripped from both ends. 400kV Raichur TPS-Raichur line-2 tripped at Raichur TPS end due to suspected over-reach of distance relay from Raichur TPS end. 400 kV Raichur- Mahboobnagar line tripped from Mahboobnagar end due to suspected mal-operation of distance protection. Unit-7 and ICT-2 at RTPS tripped
4	Tripping of 220kV Kaiga-Kodasalli line, Unit-2&3 at Kaiga Nuclear power station	11-03-2015 @ 21:49Hrs	11-03-2015 @ 23:19Hrs	Gen loss :670 MW	220kV Kaiga-Kodasalli line tripped due to failure of B-phase CT. Unit- 2&3 at Kaiga tripped due to tripping of auxilliaries.
5	Tripping of HVDC pole-1&2 at Gazuwaka and 400kV Jeypore Gazwaka line-1	14-03-2015 @ 17:12Hrs	14-03-2015 @ 17:36Hrs		400kV Jeypore-Gazuwaka line-1 tripped on operation of over voltage protection. Tripping of East side Filter banks led to blocking of Pole-1 at Gazuwaka. Pole-2 at Gazuwaka tripped on operation of differential current B-phase trip
6	Tripping of HVDC Bhdrawati pole-1	18-03-2015 @13:55Hrs	18-03-2015 @14:06Hrs		Pole-1 tripped on "VCC1.MAIN CIRCUIT FULL FLOW - V-LOW" alarm. Due problem in control logic, VCC-1 pump couldn't attain full speed.
7	Tripping of ICT-2&3 at 400kV Hosur substation of POWERGRID.	26-03-2015 @ 15:40Hrs	26-03-2015 @ 16:11Hrs	load loss : 70MW	230kV Bus-2 at Hosur(PG) got tripped as spurious initiation got extended to LBB relay of 230kV Hosur-Hosur(PG) line at Hosur(PG) end due to shorting of contacts in lockout relay. 400/230kV ICT-2, ICT-3, 230kV Hosur-Vinnamangalam, 230kV Hosur(PG)-Hosur which were connected to Bus-2 got tripped along with bus coupler breaker.
8	HVDC TALCHER - KOLAR POLE 1 AT KOLAR	30-03-2015 @ 19:30 Hrs	30-03-2015 @ 20:41 Hrs		CONVERTOR TRANSFORMER OLTC TRIP

#### VIII) PROGRESS OF SHUNT CAPACITORS

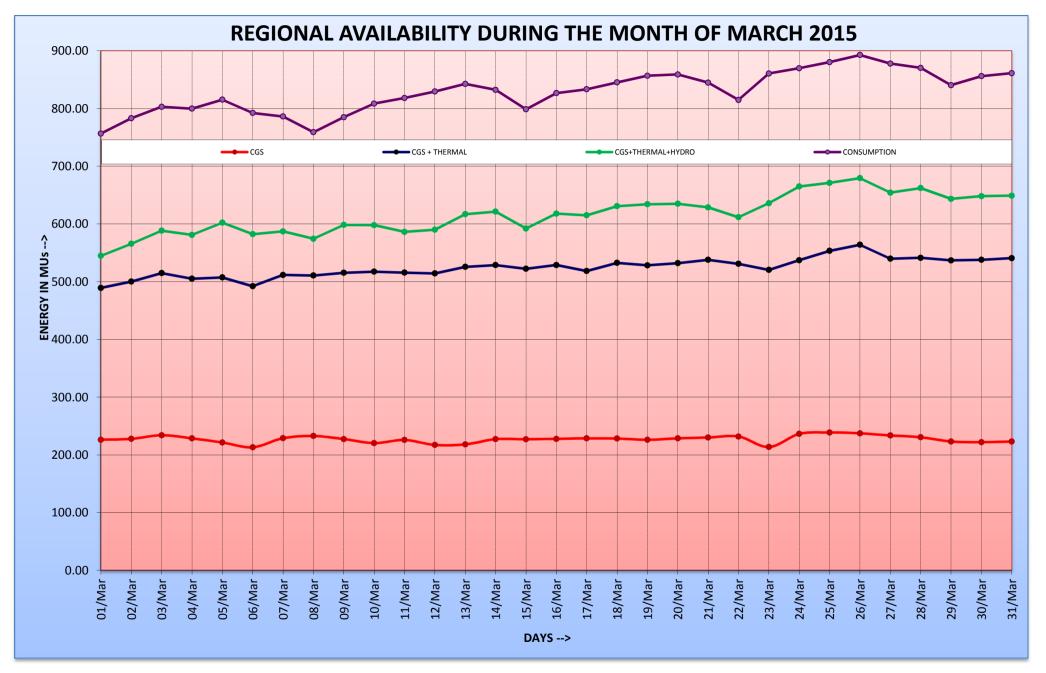
STATE	as on	Capacitors in working condition as on 31-03- 2014	*Programme of SEB's for 2014-2015	Capacitor Addition in March2015	Capacitors installed during 2014-2015	Carry Over of 2013-2014	Decommissio ned / Permanently Failed During 2014-2015	Capacitors Failed During 2014-2015	Capacitors Repaired During 2014-2015	Total Capacitors in Working Condition as on 31-03-	Total Commulative Installed as on 31-03-2015
APTRANSCO	6593.40	6593.40		0.00	0.00	55.00	0.00	0.00	0.00	6593.40	6593.40
TGTRANSCO	Yet to furn	ish details									
KPTCL	4459.20	4459.20		0.00	0.00	53.96	0.00	0.00	0.00	4459.20	4459.20
KSEB	995.00	995.00	10.00	0.00	0.00	10.00	0.00	220.00	50.00	815.00	995.00
TNEB#	3590.41	2874.51		0.00	0.00	101.00	0.00	24.00	0.00	2850.51	3590.41
PUDUCHERY	77.02	77.02		0.00	0.00	0.00	0.00	0.00	0.00	77.02	77.02
TOTAL	15715.02	14999.12	10.00	0.00	0.00	219.96	0.00	244.00	50.00	14795.12	15715.02

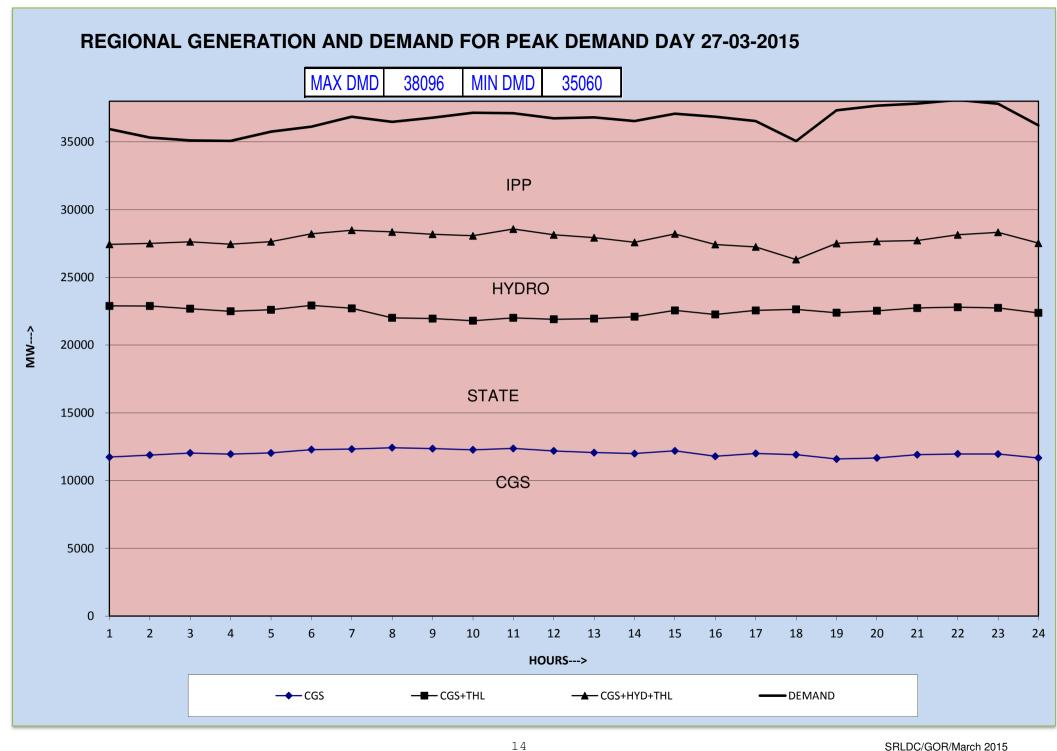


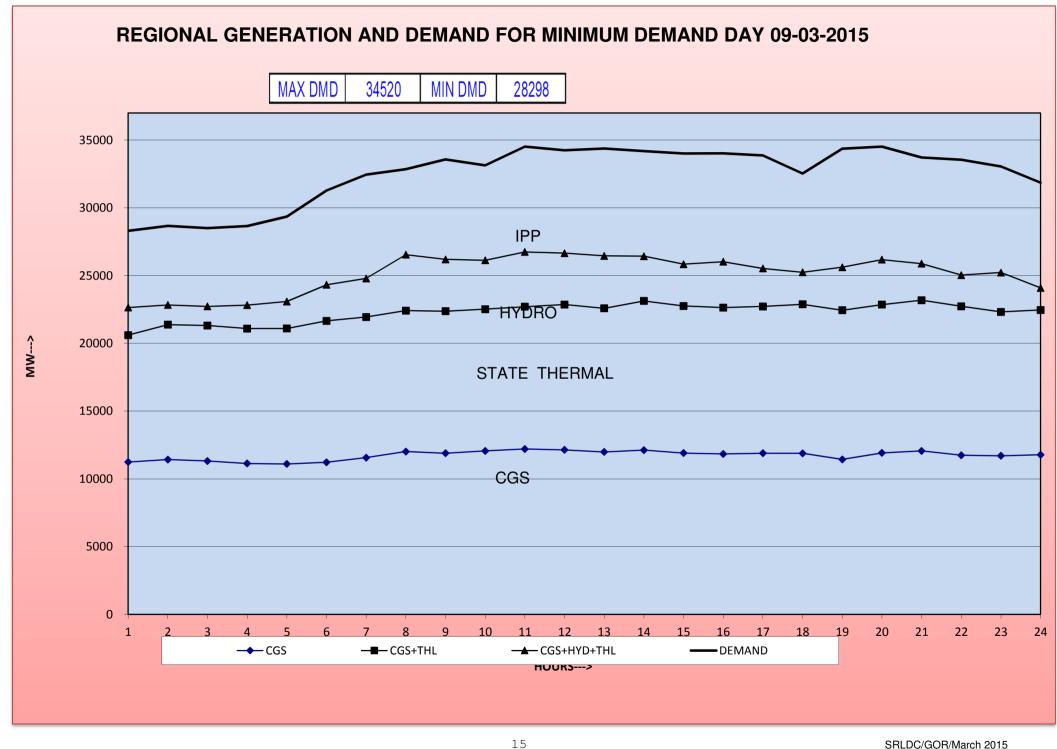
DATE	FVI
01-Mar-15	0.19
02-Mar-15	0.22
03-Mar-15	0.11
04-Mar-15	0.07
05-Mar-15	0.06
06-Mar-15	0.10
07-Mar-15	0.10
08-Mar-15	0.06
09-Mar-15	0.06
10-Mar-15	0.06
11-Mar-15	0.08
12-Mar-15	0.05
13-Mar-15	0.07
14-Mar-15	0.07
15-Mar-15	0.05
16-Mar-15	0.10
17-Mar-15	0.06
18-Mar-15	0.06
19-Mar-15	0.08
20-Mar-15	0.20
21-Mar-15	0.19
22-Mar-15	0.10
23-Mar-15	0.09
24-Mar-15	0.12
25-Mar-15	0.07
26-Mar-15	0.11
27-Mar-15	0.09
28-Mar-15	0.07
29-Mar-15	0.10
30-Mar-15	0.07
31-Mar-15	0.08
AVERAGE	0.09
MAXIMUM	0.22
MINIMUM	0.05

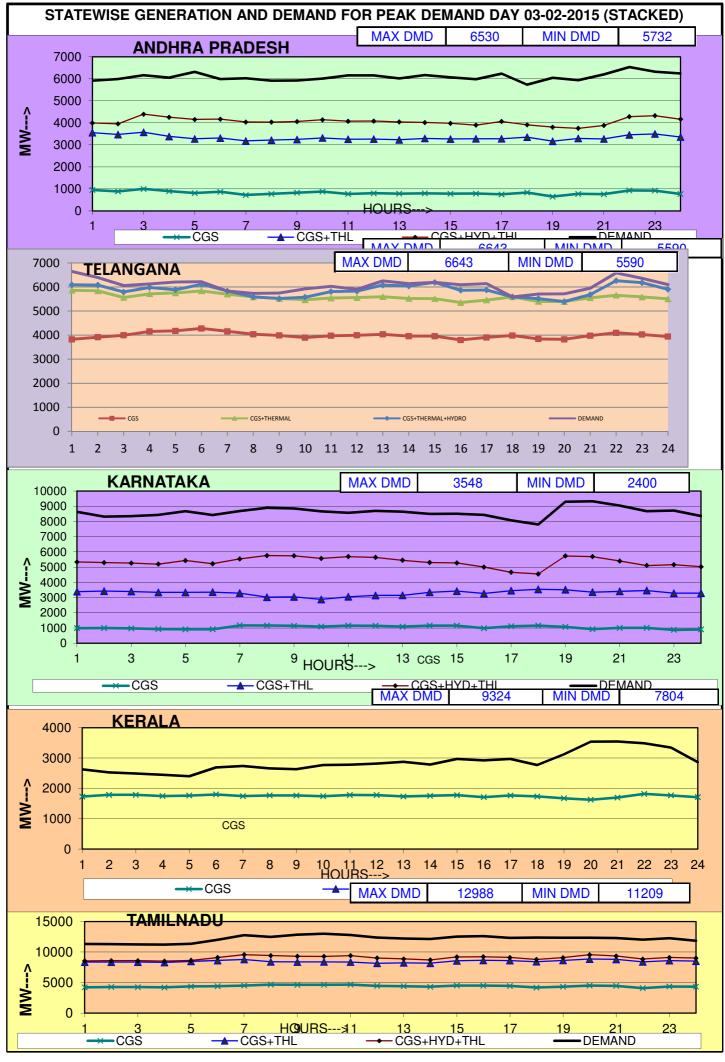
FVI= 
$$\frac{10 \sum (F-50)}{24 \times 60}$$

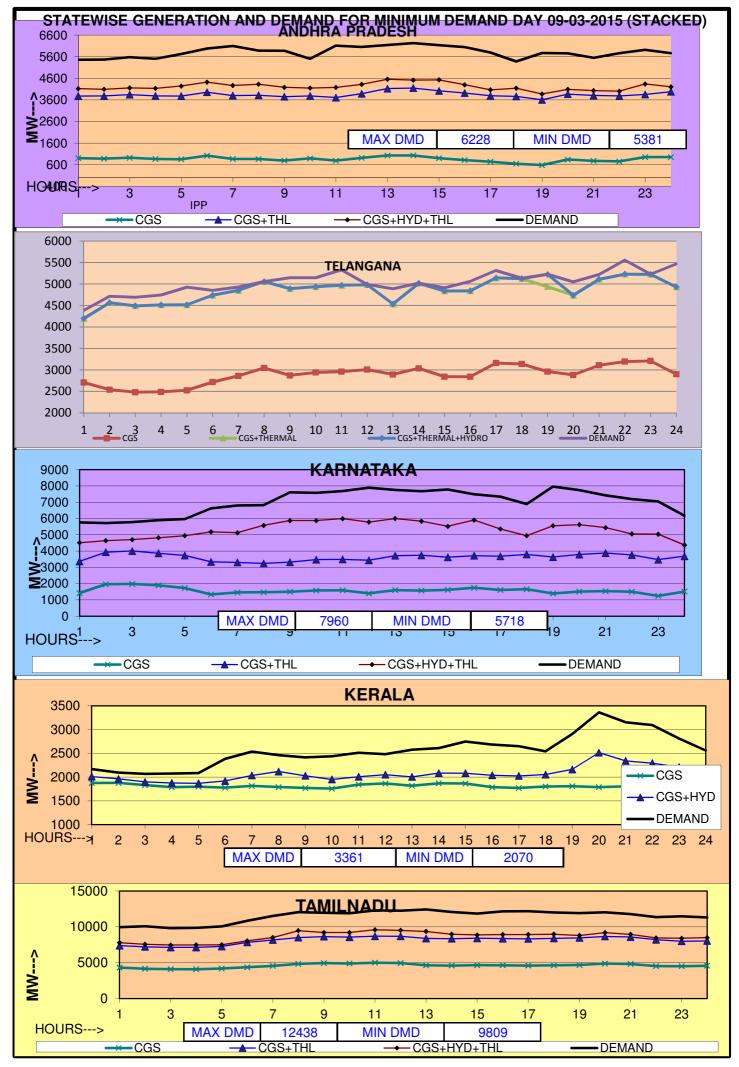
Note:Where F=frequency measured at one minute interval.











ENERGY EXCHANGES FOR March 2015 AMONG THE CONSTITUENTS (MU's) FROM ER 0.000 480.915 CHR-RGM H.V.D.C JEY-GAZ H.V.D.C 0.000 NTPC, SIMHADRI ST-II Raichur Sholapur 705.886 GOA NTPC, RGM 8.090 57.510 1918.396 733.021 208.090 748.695 0.0 ORISSA **ANDHRA KARNATAKA** 532.513 **PRADESH** 206.11 647.375 31.277 0.0 0.000 34.658 CSEB 0.0 TAL-KOLAR H.V.D.C 570.12 79.042 KGS FROM E 1478.633 0.000 PONDY 195.687 761.272 364.871 80.666 112.28 NEYVELI-II **KERALA** TAMILNADU 6.13274 1032.08 1068.657 314.695 744.682 291.71 NEYVELI TS-I MAPS KKNPP (Exp) 33.573 NEYVELI TS-II (EXP)

	<u></u>		neration Schemes in Southern Region
Sl. No	Station	Capacity (MW)	Progress / Status
	Name of the State : Andhra		
Α	Hydro (State) :		
1	Tail Pond PH at Nagarjunasagar	$2 \times 25 = 50$	BY March 2015
2	Lower Jurala	6 x 40 = 240	Unit I :Synch on 29.12.13, June 2013, Unit2: on10.01.14 Jan'14 Balance 4 Units at 3in 2014-15
3	Pulichintalla	4 x 30 = 120	Unit I : Mar 2015, Unit 2 :Jun 2015, Unit 3 : Sep 2015 , Unit 4:Dec 2015
4	Dummugudem	320	2013-15.
3	Polavaram	12x80 = 960	
5	Kamthanapally	450	$150 \text{ MW} \rightarrow 2014\text{-}15,  300 \text{ MW} \rightarrow 2014\text{-}15$
(a)	Thermal (State):		
1	Kakatiya TPP Stage-II	1 x 600 = 600	COD by 31.03.2015
	Kakatiya TPP Stage-III	1 x 600 = 600	2017-18 onwards
2	Rayalaseema TPS Stage- IV	1 x 600 = 600	Unit-VI (600MW) →by 2015-16
4	Sattupalli TPS	1 x 600 = 600	to be tied up
5	Singareddipalli	5 x 40 = 200	•
6	Kothaguden TPS (Stg - VII)	1 x 800 = 800	2016-17
7	Dr. NTTPS, Vijayawada (Stg - V)	1 x 800 = 800	2016-17
8	Vadarevu Ultra Mega Power Project Stage I (U-1,2) & Stage II (U-3,4,5)	5 x 800 = 4000	U-1&2 by 2016-17, U-3,4&5 by 2017-20
(b)	Thermal (Joint Venture):		
	Sri Damodaram Sanjeevaiah TPP		Unit-1 : Synch on 31-03-14,COD by 2014-15, Unit-2 :
1	(Krishnapatnam JV)	$2 \times 800 = 1600$	Synchronized on 16.12.2014
2	Srikakulam TPS (JV)	4 x 600 = 2400	2014 - 16 (To be tied up)
B (c)	Thermal (Private):	1 X 000 = 2 100	2011 To (To be nea up)
1	Bhavanapadu TPP (East Coast Energy Ltd),	(2x660)	Phase I $\rightarrow$ 2015-16
•	Kakarapalli, Srikakulam (Dist)	+ (2x660)	Phase II $\rightarrow$ 2015-16
2	Paloncha (Nava Bharat), Khammam	150	
3	Thermal Powertech - Nellaturu	3x660 = 1980	Unit 1 $\rightarrow$ Synchronized on 22.12.14, Unit 2 $\rightarrow$ 2015-
3	Thermal I owerteen Trematura	3x000 =1700	16,Unit 3:Mar-2017
4	Krishnapattanam UMPP	6x660 = 3960	Project may be delayed Developer stopped the work
5	Gunupudi (Surya Chakra TEPL)	660 + 660	Troject may be delayed Beveloper stopped the work
	SEPL phase-II UNIT#4	150	U#4 Synchronized on 30.12.2014
6	HNPCL (Hinduja), Pavalavasa, Vizag	2x520 = 1040	Unit 1 $\rightarrow$ May 2015, Unit 2 $\rightarrow$ 2015-16
7	Thamminapatnam TPP(Ph-II-U 1&2)	2x150 = 300	Unit $1 \rightarrow \text{Sep } 2016$ , Unit $2 \rightarrow \text{Dec } 2016$
	Thamminapatnam TPP(Ph-III-U 2) (MEPL-Coastal thermalproj)	2x660=1320	End of 12th plan
	NCCL Phase-1 unit 1&2	2x660=1320	Unit 1 $\rightarrow$ 2015-16, Unit 2 $\rightarrow$ 2015-16
С	Nuclear (State JV):		
	Kadappa Nuclear Power Plant	2x1000=2000	2014-16 (To be tied up)
(a)	Gas Based (State) :	2.11000 2000	201: 10 (10 00 tied up)
(ω)	Integrated gassification combined		
1	cycle (IGCC) plant at Dr. NTTPS (JV)	$1 \times 182 = 182$	U#8 by 2017-18
2	Shankarpally Gas Power Plant	1x1000=1000	2016-17
	Combined cycle gas based project	1x700=700	Unit 1 $\rightarrow$ 2016-17, Unit 2 $\rightarrow$ 2017-18
3	near Karimnagar	2x700=1400	Unit $3 \rightarrow 2018-19$
(b)	Gas Based (Private):	2.1, 00-1 100	
1	Patancheru (Astha PCPL), Medak (Dt)	28.00	31.03.2012
2	Peddapuram (SPP Ltd), EG (Dist)	2262.00	5110512012
3	Chigurukota (Sriba Industries), Krishna (Dt)	13.60	
4	Gautami CCPP Stage-II, Peddapuram	$2 \times 400 = 800$	
5	GVK Phase-III, Jegurupadu	$2 \times 400 = 800$ $2 \times 400 = 800$	
6	Mathya Giri (Vasavi), Nalgonda (Dist)	210.00	
7	Guggilla, Karimnagar (Dist) - Elgen	350 + 350	
8	Konaseema Phase-II, Ravulapalem	820.00	
9	Lanco Phase - III, Kondapalli	2 x 371 = 742	Held up for want of gas
10		$2 \times 3/1 = 742$ $20.00$	
	Chandaparu, WG (Dist) - RVR		October 2012
11	Vetlapalem, EG Dist (Greenco)	60 + 60 = 120	Hold ye for wont of a
	Vemagiri, EG Dist (GMR)	$2 \times 384 = 768$	Held up for want of gas
12		2x16.735 +	

Sl. No	Station	Capacity	Progress / Status
51.110		(MW) 76+120 +	110g1ess / Stavas
14	RVK, Jegurupadu, EG Dist	(2x120) + 50	
13	Thamminapatnam (K.Patnam PCL), Nellore	1320 + 660	March - 2015
	December 1 Francis Comment (DEC)		
E	Renewable Energy Sources (RES):	27.22	
1	Municipal Waste based	37.33	
2	Bio - mass based co-generation	37.00	
3	Industrial waste based power plants	31.82	
4	Mini Hydel Projects (H)	36.06	
5	Bagasse based Co-generation	150.00	
6 <b>F</b>	Bio - mass based power plant	34.00	
r	Wind (Private): Wind Energy ( W )	1228.90	114.97 MW commissioned 250.00 MW to be commissioned
G	Mini Power Plants :		
	Mini Power Plants	516.51	74.31 MW commissioned 521.00 MW to be commissioned
H (a)	Solar (State):		
	P. Jurala HEP	1.00	
H (b)	Solar Power Project (Private) :	752.68	
	Name of the State : Karnata	aka	
Α	Hydro (State) :		
1	Gundia Phase - I	400	Environmental Clearance awaited
2	Gundia Hydro Electric Proj. (Phase - II)	200	After getting Environmental Clearance from MoEF for Phase-I, Survry,
	Hassan, Dakshina Kannada District		Invetigation works & EIA Studies will be made for Phase-II
3	Shivasamudram Seasonal Scheme	345	DPR has been submitted to CEA vide letter dt 30.3.2012
4	Gangavali Stage - II Scheme (Bedthi)	400	Pre Feasibility Report (PFR) submitted to CEA
5	Kali - Stage III (KHEP) Hydro Electric Project	300	DPR could not be taken up, as this project is within wild life sanctuary
6	Aghanashini (Tadri) Hydro Electric Project	600	KPCL submitted DPR to CEA vide their letter dated 29.10.2007
7	Mahadayi Hydro Electric Project	320	Field surveys taken up for the revised proposal of this project, outside the proposed Bhimghad Wild Life Sanctuary. DPR under preparation
8	Additional Unit at Munirabad PH	10	LoA has been issued on 04-02-2012 to M/s. Allonward-SSIPL-KR & Co
9	Additional unit at Ghataprabha	20	NIT issued on 17.03.2010. Evaluation of Price Bid under process
10	RM&U of Nagjhari PH Unit - 4,5 & 6	3 x 15 = 45	Unit 4 & 5 completed. Unit 6 will be taken for RM&U during 2012-13. Programmed to be commissioned during XII Plan
B (a)	Thermal (State):		
2	Bellary TPS, Stage I, Unit - 3 (Super Critical)	700	GoK has approved to take up the project. Works are in progress
3	RTPS Stg - II : a) Yermarus TPS	2 x 800 = 1600	Site allotted from KIDAB . Work under progress., Unit 1
	b) Edlapur TPS	800	MoEF clearance awaited. Proposed to be set up in the available land at RTPS mill reject area
4	Mangalore TPS	1600	12th Plan
5	Chattisgarh Pit Head Thermal Power Plant	1600	Work is in progress. Commissioning by 2015-16
B (b)	Thermal (Private):		
1	Annechakanahalli Phase I	1000	12th Plan
2	Kalgurki Phase I	1000	12th Plan
3	Yadagiri Phase I	1000	12th Plan
C	Gas Based (State) :		
1	Bidadi Combined Cycle Power Plant	700 ± 20 %	Land required for the project has been acquired. M/s GAIL has commenced the work of establishing gas terminal.
2	Tadadi Combined Cycle Power Plant	2100	Pre Feasibility Report (PFR) prepared & action has been taken for obtaining statuatory clearences. KIADB allotted 400 cares of land.
D	Solar (State):		
1	Solar Photo Voltaic Power Plants at Belakavadi, Near Shivasamudram	5	Plant commissioned on 25.06.2012 and connected to the Grid
E	Wind (Joint Venture):		
-		•	•

Sl. No	Station	Capacity (MW)	Progress / Status
1	500 MW Wind Energy Projects by KPTCL in JV with NTPC	500	GoK approved for the development of 500 MW Wind Energy Projects. Sites identified for Kappatagudda (39.5 MW), Guledagudda (100 MW). Requested for allotment of Forest Land. Expected in XII plan.116.5 MW Commissioned
	Name of the State : Tamil Na	du	
`	Hydro (State):		
1	RMU of Periyar Power House Unit - III	7.0 (35 to 42)	Woorks under progress
	Periyar Vaigai SHEP - III	$2 \times 2 = 4.0$	
	Periyar Vaigai SHEP - IV	$2 \times 1.25 = 2.5$	By July 2015
2	Bhavani Barrage I (Nellithoral Lower Bhavani)	$2 \times 5 = 10$	Expected by 2014-15
	Bhavani Barrage II (Nellithoral Lower Bhavani)	2 x 5 = 10	units are running under project wing
4	Kundah Pumped Storage HEP Phase I (1x125 MW)	125	Expected by 2016
	Kundah Pumped Storage HEP Phase II (3x125 MW)	375	Expected by 2016
5	Mettur Pumped Storage HEP	500	Preliminary Stage
6	Vellimalai Pumped Storage HEP	200	Preliminary Stage
7	Small HEP proposed to be developed by Private Promoters	118	Preliminary Stage
8	Moyar Ultimate Stage HEP	25	Preliminary Stage
9	Kollimalai HEP	520	Preliminary Stage
	Sholayar phase I (Unit 1)	7(35 to 42)	UP Rating from 35 to 42 MW
	Sholayar phase I (Unit 2)	7(35 to 42)	UP Rating from 35 to 42 MW
B (a)	Thermal (State):		
1	North Chennai TPS Stage -II	600	Unit 2:COD:08-05-2014
2	North Chennai TPS Stage -III	1x800=800	Expected by 2017
3	North Chennai TPS Stage -IV	2x800=1600	Expected by 2017
4	Mettur TPS Stage - III	1x600=600	
5	Tuticorin Thermal Power Project	1x800 = 800	2015-16
6	Ennore TPS Annexe	1x660=660	By 2016
7	Replacement of existing 40 year oldETPS	1x660=660	2017-18
8	Ennore (SEZ) TPS at Kattupalli	2x 600=1200	2015 - 16
B (b)	Thermal (Private):		
1	Cheyyur UMPP (Coastal Tamil Nadu Power Ltd) Subsidiary of Govt of India, PFC	5x800 = 4000	2017-18
2	Cuddalore IPP	2 x 660 MW	PPA signed
3	Melamaruthur (Mutiara), Tuticorin (Coastal Energen Pvt Limited)	2 x 600 MW	Court case on SEC 11 of IE ACT
B (c)	Thermal (Joint Venture):		
1	TNEB-BHEL JV at Udangudi	2x800 = 1600	BY 2017
2	Udangudi Expansion - Stg II	1x800 = 800	BY 2017
3	Vallur TPP (JV with NTPC) Stg I : Phase II $\rightarrow$ 1 x 500 MW	1x500	Unit III - 28-02-2014 SYNCHRONISED.
4	NLC-TNEB at Tuticorin	2x500=1000	Unit I & 2 COD by 2014-15
C	Gas Based (State) :		,
1	Basin Bridge Closed loop conversion (120 MW to 220 MW)	100	Subject to availability of gas

Sl. No	Station	Capacity (MW)	Progress / Status
D	Non Conventional Energy Sources (NCES) :		
1	Establishment of Co-generation plants in 10 Nos.	6 x 15.5 = 93	
	Co-operative and 2 Nos Public Sector Sugar Mills		2014-15
	in Tamil Nadu along with Sugar Mill	1 x 15.0 =15	2014 13
	Modernization.	= 183	
2	Wind	300	129.59MW commissioned, Balance underprogress
3	Bio-Mass	10	2014-15
4 E	Solar Trick Production Production	1000	2014-15
<u></u> 1	Tariff Based Competitive Bidding Route:		
-	Uppur TPP, Tiruvadanai at Ramanathapuram District	2x800 = 1600	2016-17
2	Utharakosamangai TPP at Ramanathapuram District	2x800 = 1600	2016-17
	Name of the State : Kerala		
`	State (Hydro):		
1	Chimmony, Trichur	2.5	Expected by Mar5 2015
2	Chattankottunada Stg-II , Kozhikode	$3 \times 2 = 6$	Proposed date of commissioning : Dec 2014
3	Pallivasal Extension	$2 \times 30 = 60$	Expected by Dec 2015
4	Thottiyar	30 + 10 = 40	Expected by NOV 2015
6	Anakkayam H.E. Project	7.50	Expected by 2016-2017
7	Barapole SHEP, Kannur	15.00	Proposed date of commissioning : Oct '14
8	Vilangad SHEP, Kozhikode	$3 \times 2.5 = 7.5$	Commissioned on 15-07-2014
9	Perumthenaruvi Project	6.00	Expected by JUNE-15
10	Vellathooval SHEP	3.6	Proposed date of commissioning: FEB-2015
11	Adiyanpara	3.5	Proposed date of commissioning : January 2015
12	Kakkayam SHEP, Kozhikode	3	Proposed date of commissioning : Nov' 14
В	Augumentation:	-	
	Tragamentation :	NIL	
С	IPP (Hydro):	NIL	
1		10.5	Unit 1 .29 00 12 Unit 2 .20 09 12 Unit 2 . 02 00 12
- 1	Karikkayam		Unit 1 :28-09-13, Unit 2 :20-08-13 Unit 3 : 02-09-13
	Meenavallam	1.5x2=3	Comissioned ,COD not declared
<u>!</u>	Central Sector (Thermal):		
1	Neyveli TS-II (Expansion) (NLC)	2x250 = 500	Unit I- Achieved FL on 04.02.2012.,COD Declared
	IV 1 : CEDG D:: (CE 1) NEDG	2 000 2400	Unit II -2014-15
	Kudgi STPS, Bijapur(ST-1),NTPC	3x800=2400	Unit 1 :Sep 2015, Unit 2 : Mar-2016
	Kudgi STPS, Bijapur(ST-2),NTPC	2x800=2400	Expected during 13th plan
2	Jayamkondam Lignite (NLC)	1600	12th Plan
3	Neyveli TS-III (NLC)	1000	12th Plan
4	Sirkali TPP	3x660=1980	From GoI approval
			Unit 1:52 months
			Unit 2:58 months
			Unit 3: 64 months
			(PPA has been signed)
<u>II</u>	Central Sector (Nuclear):		
1	Kalpakkam (PFBR)	500	2014-15
2	Kudankulam (NPCIL)	2x1000=2000	Unit I: Synchronised on 22-10-2013, achieved full load on
			07-06-2014, COD on 31.12.2014
			Unit II: August 2015
III	Central Sector (Gas Based) :		
	Kayamkulam CCPP Module 1 to 3 (NTPC)	1050/1950	12th Plan. Gas supply by 2014