THE STATUS OF ELECTRICITY POWER SECTOR IN TAMIL NADU SINCE ECONOMIC REFORM PERIOD

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Introduction

Electricity power has been universally recognized as one of the most important inputs for economic growth and human development. There is a strong two-way relationship between economic development and energy consumption. The availability of cheap electricity energy may serve to stimulate industrial development, make cooking possible and increase agricultural production. In other words, energy is an important parameter of overall economic developmental activity of a country. That is the reason why the process of economic development demands increasingly higher levels of energy consumption. As an economy develops, its demand for energy tends to increase and its consumption pattern with respect to the forms of energy and energy sources also tends to change. Similarly, the household sector requires the energy mainly cooking and lighting. About 60 percent of India's population lives in rural areas, where biomass (mainly firewood) the primary sources of energy. Household vehicles also consume the energy in form of oil and petrol. The domestic demand of energy for meeting fuel and lighting requirements has also been increasing sharply during the past years. In the urban sectors, the fuel requirements are being increasingly met through kerosene and L.P.G similarly, the lighting requirements are being met by kerosene in rural areas and by electricity in the urban areas. There has been increase of domestic use of energy due to the improvement in the standard of living. Hence, the household energy consumption pattern of the rural people is very significant in Tamil Nadu. Tamil Nadu is the eleventh largest state in India by area and the seventh most populous state. The State of Tamil Nadu is located in the southern region of India with installed electricity generation capacity of 10515.34 MW to satisfy the state's energy needs. The installed capacity of non conventional energy sources as of March 2013 is 7999.025 MW. The state's power comes from Thermal, Hydel and Gas (natural gas, or liquid like oil) sources predominantly. Apart from these conventional sources it also produces from Non-Conventional Renewable sources like Wind, Solar and Bio-Mass.

Present Status of Demand –for Supply of Electricity power in the State

The present demand of power in the state is around 13,000-13,500 MW. It is expected to go up to 14,500 MW by the end of 2015. This demand will be met by the

generation from existing power stations, power from projects to be commissioned in the year 2014-15 and power purchase.

Installed capacity

The installed electricity power capacity of conventional energy sources of Tamil Nadu Generation and Distribution Corporation Limited is 11,884.44 MW in 2015 which includes TANGEDCO's Hydro Power 2,284.4 MW, Thermal Power 4,060 MW, Gas Stations 515.88 MW, share from Central Generating Stations 3,870 MW, Private Power Projects 1,154.16 MW. This installed capacity has increased to 12,484.44 MW as on 01.06.14 after declaration of commercial operation of North Chennai Thermal Power Station Stage unit II. The installed capacity of non-conventional energy sources was 8,219.67 MW which includes wind generation 7,252.61MW, Solar Power 96.66 MW, Biomass 211.00 MW and Co-generation plants 659.40 MW. The Solar generation capacity increased to 107.20 MW on end of 2015.

Power purchase

Under medium term power purchase, 500 MW of power is being procured from June 2013. Power purchase agreements have been signed to procure 3,330 MW of power under long term for 15 years from 2014-15. Out of this, 224 MW of power is already being availed. 1,500 MW of power would be flowing from August 2014. The balance will be available from 2015-16.

Rural Electrification in Tamil Nadu

The State of Tamil Nadu had been declared 100 percent electrified as all the inhabited villages were electrified. With the implementation of Government of India scheme, Rajiv Gandhi Grameen Vidyutikaran Yojana aimed to achieve the goal of electrification of all households in the State, below poverty line households will be provided service connections, in addition to the 100 percent of the population (16.92 lakh households) will get access to electricity. Under the Rajiv Gandhi Grameen Vidyutikaran Yojana, the State has obtained sanction for implementation of the scheme in 26 districts at a cost of 447.41crore towards 100 percent electrification of rural households. The RGGVY works in all the 26 districts have been completed, thereby providing electrification to all the households. Implementation of this scheme to electrify all the rural households in the remaining three districts viz., Nilgris, Tirunelveli and Dharmapuri will be completed by 2014.

Review of Literature

Arul (2015), in his paper reviewed and analyzed the wind energy power generation and consumption scenario in Tamil Nadu of India and its challenges and issues. It also

compares the capacity of wind turbine existing in the study area with the turbines of leading wind energy generating turbines of various countries and to understand the current wind power generation and consumption in the study area. The concluding part of this study reveals that India's energy policies need to be shaped to ensure energy security, keeping the environment clean, better management of power distribution, power evacuation and attaining energy self-sufficiency. Some modern innovation and invention has to be made like recent innovation for power saving method using new type of battery that could make it economical to store a couple of days of electricity from wind forms.

Sophia Porchelvi R and Sathya K (2015) were focuses on their study the renewable energy sources as an alternative source of energy. The aim of the study is to satisfy the energy demands in the study area chosen by integrating in an economical way, the available renewable energetic sources. Since, Nagapattinam district is in the coastal belt of Bay of Bengal, both solar and wind energies are abundant in the places chosen for the study. The main occupation of the district is agriculture. For agriculture, Tamil Nadu Government is providing electricity with free of cost. For this purpose, the Government is buying electricity from private sector for heavy amount. To avoid such things it can generate our own integrated renewable energy. It is important to find an alternative to minimize buying electricity from private sectors. The integration of solar and wind energies will reduce the burden of buying electricity which is very beneficial to the government. Moreover, agriculture consumes a large amount of non-renewable resources, specifically petrol and diesel; it would be beneficial to switch over to integrated renewable resources. The authors were concluded that the integrated energy sources will be cost benefit as well as fulfill the energy needs without any interruption.

Importance of the Study

Power is an essential infrastructure service for various sections of the society. Electricity is used as a major energy input in the production process in various sectors of the economy. Electricity consumption can be considered to be the major determinant of the economic development in a modern economy. Per capita availability of power is being used as an indicator for measuring the growth and development of a country. Electricity is used as a basic energy service in households for heating and lighting. Ensuring some minimum level of consumption is socially desirable. National Electricity Policy 2005 also specifies forty units per month as lifeline consumption to be supplied to every household at an affordable price.

Research Problem

The installed capacity of the State as on 31.5.2012 is 10364 MW. However, the average availability stands at 8500 MW, while the demand for power ranges from

10000-12300 MW. Even after commissioning of alternate sources of generation, the State is facing acute power shortage due to increasing demand. Increase in per capita consumption pattern due to rise in the number of consumers and their consumption pattern on one side and capacity addition on the other have resulted in widening of the gap between demand and supply. Also, delay in commissioning of projects, acute corridor constraint for transmission of power, etc., are the other factors attributable for power shortage. Due to inadequate tie-up with long terms sources of power generation, the possibility of bridging the gap between demand and supply becomes difficult. At present, the shortage is managed by resorting to power purchases, utilizing wind generation and restriction and control measures. The wind power is highly variable in nature depending upon the velocity of wind. Even though it is infirm, Wind Energy Generators (WEGs) are connected to the grid. The total installed capacity of wind energy generators in the State is almost 50 percent of the total installed capacity of the country. The unpredictable nature of wind energy poses a great challenge for the grid management. Wind mills contribute more than 3000 MW during the season between May and October which helps TANGEDCO to improve the power situation in the State.

While wind energy is seasonal and also variable on daily basis, solar energy has better predictability with average solar incidence of 5.5-6 KWh/m2/day. Tamil Nadu is amongst the States with the highest solar insulation in India. With the release of 'Tamil Nadu Solar Energy Policy 2012', the State aims to promote setting up of solar power projects to the extent of 3000 MW over a period of 3 years. Roof top solar installation will be made mandatory in Government buildings and institutions. All domestic consumers will be encouraged to put up roof-top solar installations. Setting up of Solar Power Plants will help to reduce the Transmission & Distribution losses and other infrastructure expenditure.

Coal continues to remain the mainstay of the power sector. Major portion of the total power comes from coal-fired power stations. Power sector is the major consumer of coal in the country absorbing around 78 percent of the country's total coal production. The total quantity of coal required for TANGEDCO's four Thermal Power Stations with a capacity of 2970 MW is 16 Million Tones Per Annum (MTPA). Due to severe scarcity of coal, the Government of India through Coal India Ltd., supplies only 13.5 MTPA of coal. The balance requirement of 2.5 million tones of coal is to be imported to bridge the gap between anticipated demand and domestic availability. It is met by the captive blocks viz., Gare Pelma Sector II in Chattisgarh and Mandakini-B in Odisha for thermal power generation.

Methodology

The study is based on the secondary sources of information as its data support mainly taken from the Tamil Nadu an Economic Appraisal reports of various issues, State

Planning Commission Reports, Tamil Nadu Electricity Board and the reports of Tamil Nadu Generation and Distribution Corporation Ltd. The present paper covering the secular study period of Twenty Three years starts from 1990 to 2013. The presents study confined with the electricity power sector performance by selecting the key components of electricity power generation, the demand for and supply of electricity power in Tamil Nadu, net electricity power availability, gross electricity power availability and power deficit during the reforms period were consider for analysis. The research has planned to estimate the growth of all the above said variables in power sector of the state of Tamil Nadu. As far as the statistical tool for analysis is concern, the researcher planned to use log-linear exponential growth function to find out the growth performance of power sector.

Objectives of the study

- To describe the stock analysis of existing electricity power generation by its various sources in Tamil Nadu during the post economic period of 1990-2013.
- To Study about the growth performance of Electricity power Availability, Requirements and its Consumption in Tamil Nadu during the study period
- To find out the Gross Electricity Power Availability, Net Electricity Power Availability and Electricity Power Deficit in Tamil Nadu during the study period

Status of Electricity power Generation

In Tamil Nadu, the electricity power generation is depends upon the various sources of electricity power. As per the TANGEDCO reports reveals that the electricity power generated through Hydro power, Thermal Power, Wind Power and the least sources of Gas. The following table clearly tells about the year wise electricity power generation by the above said different sources of electricity in Tamil Nadu during the period of Post Economic Reform.

Table 1 Source wise Electricity Power Generation in Tamil Nadu during 1990 to 2013

(in MU)

Sl. No	Year	Hydro	Thermal	Wind	Gas	Electricity Power Generation
1.	1990-91	3982 (30.12)	9207 (69.65)	30 (0.23)	-	13219 (100.00)
2.	1991-92	4410 (31.88)	9398 (67.94)	24 (0.17)	1 (0.01)	13833 (100.00)
3.	1992-93	5636 (33.24)	11265 (66.43)	29 (0.17)	28 (0.17)	16958 (100.00)
4.	1993-94	4599 (26.05)	12962 (73.41)	61 (0.35)	35 (0.20)	17657 (100.00)
5.	1994-95	5847 (29.18)	14026 (70.00)	150 (0.75)	14 (0.07)	20037 (100.00)
6.	1995-96	4714 (21.07)	17220 (76.97)	419 (1.87)	18 (0.08)	22371 (100.00)
7.	1996-97	4252 (18.52)	18598 (81.03)	19 (0.08)	84 (0.37)	22953 (100.00)

8.	1997-98	5287 (22.92)	17682 (76.66)	19 (0.08)	78 (0.34)	23066 (100.00)
9.	1998-99	4918 (22.21)	17076 (77.12)	23 (0.10)	124 (0.56)	22141 (100.00)
10.	1999-00	4444 (18.87)	18861 (80.09)	27 (0.12)	217 (0.92)	23549 (100.00)
11.	2000-01	5450 (21.67)	19464 (77.40)	18 (0.07)	215 (0.85)	25147 (100.00)
12.	2001-02	4350 (17.02)	20325 (79.51)	17 (0.07)	870 (3.40)	25562 (100.00)
13.	2002-03	2724 (10.93)	21080 (84.56)	18 (0.07)	1107 (4.44)	24929 (100.00)
14.	2003-04	2067 (8.57)	20430 (84.72)	24 (0.10)	1593 (6.61)	24114 (100.00)
15.	2004-05	4426 (16.73)	20004 (75.63)	17 (0.06)	2003 (7.57)	26450 (100.00)
16.	2005-06	6141 (22.82)	18795 (69.83)	15 (0.06)	1964 (7.30)	26915 (100.00)
17.	2006-07	6292 (21.34)	21228 (72.01)	17 (0.06)	1944 (6.59)	29481 (100.00)
18.	2007-08	6455 (22.08)	21355 (73.03)	12 (0.04)	1419 (4.85)	29241 (100.00)
19.	2008-09	5386 (18.58)	21022 (72.53)	10 (0.03)	2565 (8.85)	28983 (100.00)
20.	2009-10	5640 (20.24)	19882 (71.36)	11 (0.05)	2327 (8.35)	27860 (100.00)
21.	2010-11	5150 (20.05)	19085 (74.31)	13 (0.05)	1436 (5.59)	25684 (100.00)
22.	2011-12	5354 (19.16)	20324 (72.74)	12 (0.04)	2252 (8.06)	27942 (100.00)
23.	2012-13	2905 (11.48)	20663 (81.67)	13 (0.05)	1720 (6.80)	25301 (100.00)
*CGR		0.06	3.06	7.60	15.94	2.82
**Sig. 'p'		.946	.000	.002	.000	.000
***R^2		.000	.639	.385	.471	.720

Source: Various Issues of Tamil Nadu - An Economic Appraisal, Statistics at a glance and Tamil Nadu Generation and Distribution Corporation Limited (TANGEDCO), Chennai – 2.

Note: the figures within the parenthesis denotes percentage to the total

*CGR denotes computed value of Compound Growth Rate

** Level of Significance at 5%

*** Computed Value of R^2

It is learned from the above table that out of various sources of electricity power generation in Tamil Nadu during the post economic reform period, the Thermal power contribute more than 84 per cent during 2002 -2004 to the total electricity power generation in the state, later it has been fluctuated to 69 per cent in 2005-06. It also again increased to more than 81 per cent at the end of the study period of 2013. It is statistically proved that the growth rate of thermal power sector is estimated at 3.06 per cent with the R^2 value of 0.639 at 0 per cent level of significant. According to the above table the second dominant sources of electricity power is Hydro electricity power which shared more than 33 per cent at the time of 1992-93 and it has been gradually decline to 11 per cent during the recent past of the year 2012-13 with the moderate fluctuation in its contribution to the total electricity power generation in between these two periods. It is evident from the above table that the gas electricity power generation is the third source of electricity power generation followed by the wind electricity power energy registered the Compound

Growth Rate of 15.94 per cent and 7.60 per cent respectively with the level of significance at 1 per cent.

Status of Electricity Power Availability Requirements and Deficit

In the status of total electricity power of the State of Tamil Nadu has been given in the form of total power availability (supply), requirements (demand) and the power deficit during the period in between 1990 and 2013. The quantum of gross electricity power availability for the State is arrived at by adding the components of auxiliary electricity power consumption, sales to other states and line losses to the total electricity power consumption of the state. It may be treated as the total electricity power availability in terms of its supply. The power deficit has been arrived deduction of electricity power requirements from the gross electricity power availability. The complete description of the electricity power in the state of Tamil Nadu during the post economic reform period is given the following table.

Table 2 Electricity Power Availability Requirement and Availability in Tamil Nadu between 1990 and 2013

(in MU)

Sl. No	Year	Total Electricity Consumption by sectors	Electricity Power Line Loss	Auxiliary power Consumption and Sale to other State	Gross Electricity Power Availability (Supply)	Electricity Power Requirement (Demand)	Electricity Power Deficit
		1	2	3	4 (1+2+3)	5	6 (5-4)
1.	1990-91	16,117 (77.51)	3,663 (17.62)	1,013 (4.87)	20793 (100)	25451	4658 (22.40)
2.	1991-92	17,040 (77.74)	3,860 (17.61)	1,020 (4.65)	21920 (100)	26800	4880 (22.26)
3.	1992-93	18,988 (78.41)	4,058 (16.76)	1,169 (4.83)	24215 (100)	29442	5227 (21.59)
4.	1993-94	20,157 (78.39)	4,230 (16.45)	1,328 (5.16)	25715 (100)	31271	5556 (21.61)
5.	1994-95	23093 (79.45)	4723 (16.25)	1,249 (4.30)	29065 (100)	35194	6129 21.09
6.	1995-96	24413 (78.45)	5011 (16.10)	1,697 (5.45)	31121 (100)	37829	6708 (21.55)
7.	1996-97	25598 (78.28)	5243 (16.03)	1,859 (5.69)	32700 (100)	39802	7102 (21.72)
8.	1997-98	26740 (78.50)	5458 (16.02)	1,867 (5.48)	34065 (100)	41164	7099 (20.84)
9.	1998-99	27657 (78.63)	5667 (16.11)	1,848 (5.25)	35172 (100)	42482	7310 (20.78)
10.	1999-00	30238 (78.93)	6123 (15.98)	1,952 (5.09)	38313 (100)	46388	8075 (21.08)
11.	2000-01	33216 (79.53)	6603 (15.81)	1,945 (4.66)	41764 (100)	50312	8548 (20.47)

12.	2001-02	35202 (80.15)	6831 (15.55)	1,887 (4.30)	43920 (100)	52776	8856 (20.16)
13.	2002-03	36347 (78.31)	7979 (17.19)	2,088 (4.50)	46414 (100)	56726	10312 (22.22)
14.	2003-04	38374 (77.53)	8495 (17.16)	2,629 (5.31)	49498 (100)	60622	11124 (22.47)
15.	2004-05	40848 (78.04)	9044 (17.27)	2,453 (4.69)	52345 (100)	63842	11497 (21.96)
16.	2005-06	43582 (76.83)	9788 (17.25)	3,356 (5.92)	56726 (100)	69870	13144 (23.17)
17.	2006-07	49263 (77.50)	11011 (17.33)	3,289 (5.17)	63563 (100)	77778	14215 (22.36)
18.	2007-08	52849 (79.10)	11597 (17.36)	2,368 (3.54)	66814 (100)	81399	14585 21.83
19.	2008-09	52489 (78.25)	11759 (17.53)	2,828 (4.22)	67076 (100)	81665	14589 (21.75)
20.	2009-10	57092 (78.33)	12681 (17.40)	3,114 (4.27)	72887 (100)	88682	15795 (21.67)
21.	2010-11	58446 (76.83)	14756 (19.40)	2,870 (3.77)	76072 (100)	93698	17626 (23.17)
22.	2011-12	60987 (79.69)	12699 (16.59)	2,848 (3.72)	76534 (100)	92081	15547 (20.31)
23.	2012-13	58622 (78.30)	13860 (18.51)	2,390 (3.19)	74872 (100)	91122	16250 (21.70)
*CGR		6.40	6.81	4.97	6.40	6.42	6.47
**Sig. 'p'		.000	.000	.000	.000	.000	.000
***R^2		.988	.987	.818	.989	.988	.981

Source: Various Issues of Tamil Nadu - An Economic Appraisal, Statistics at a glance and Tamil Nadu Generation and Distribution Corporation Limited (TANGEDCO), Chennai – 2.

Note: the figures within the parenthesis denotes percentage to the total

*CGR denotes computed value of Compound Growth Rate

** Level of Significance at 1%

*** Computed Value of R^2

The above table clearly describes the status of electricity power availability, requirements and power deficit in the State during the last twenty three years. It shows that the power availability, requirements are ever increasing right from 1990 onwards with correspondingly increasing the power deficit of the state. It is proved with the statistically estimated the compound growth rate of all the three variables are registered more than 6 per cent during the study period. It also found that there is ups and down in the power availability and requirements in the state frequently during the post economic reform period. It infers that the gross electricity power availability is constantly showing the increasing trend and registered 6.40 per cent of compound growth rate. Similarly the electricity power requirements also registered the same level by proving statistically at zero level of significance and it has been conformed to the R^2 value calculated more than

0.988 per cent for all the three variables during the study period in the state of Tamil Nadu. As far as the power deficit is concern, it is estimated on an average of 20 per cent power deficit during the entire period which unable to fulfill the gap in between the electricity power availability and power requirements continuously.

Status of Net Electricity Power Availability for Consumption

In Tamil Nadu, the net electricity power availability status which has been calculated by deducting the auxiliary electricity power consumption, sales to other states and line losses from the gross electricity power availability. The net electricity power availability exclusive for consumption during the post economic reform period in Tamil Nadu is presented in the following table.

Table 3 Net Electricity Power Availability for Consumption in Tamil Nadu during 1990 to 2013

(In MU)

Sl. No	Year	Gross Electricity Power Availability (Supply)	Auxiliary Electricity Power Consumption#	Sale to other State	Electricity Power Line Loss	Net Electricity Power Availability
		1	2	3	4	5 = (1-2+3+4)
1.	1990-91	20793 (100)	886 (4.26)	109 (0.52)	3663 (17.62)	16244 (78.12)
2.	1991-92	21920 (100)	887 (4.05)	133 (0.61)	3860 (17.60)	17040 (77.74)
3.	1992-93	24215 (100)	1027 (4.24)	142 (0.59)	4058 (16.76)	18988 (78.41)
4.	1993-94	25715 (100)	1196 (4.65)	130 (0.51)	4230 (16.45)	20159 (78.39)
5.	1994-95	29065 (100)	1249 (4.31)	157 (0.54)	4723 (16.25)	22901 (78.80)
6.	1995-96	31121 (100)	1500 (4.82)	197 (0.63)	5011 (16.10)	24413 (78.45)
7.	1996-97	32700 (100)	1652 (5.05)	207 (0.63)	5243 (16.04)	25598 (78.28)
8.	1997-98	34135 (100)	1641 (4.81)	296 (0.86)	5458 (16.02)	26740 (78.49)
9.	1998-99	35172 (100)	1643 (4.67)	205 (0.58)	5667 (16.11)	27657 (78.64)
10.	1999-00	38313 (100)	1756 (4.58)	196 (0.52)	6123 (15.98)	30238 (78.92)
11.	2000-01	41764 (100)	1743 (4.17)	202 (0.48)	6603 (15.82)	33216 (79.53)
12.	2001-02	43920 (100)	1887 (4.30)	138 (0.31)	6831 (15.55)	35064 (79.84)
13.	2002-03	46414 (100)	2063 (4.46)	270 (0.59)	7979 (17.19)	36077 (77.75)
14.	2003-04	49498 (100)	2306 (4.66)	323 (0.65)	8495 (17.16)	38374 (77.53)

15.	2004-05	51945 (100)	2101 (4.05)	352 (0.68)	9044 (17.41)	40448 (77.86)
16.	2005-06	56726 (100)	2346 (4.14)	1010 (1.78)	9788 (17.25)	43582 (76.83)
17.	2006-07	63104 (100)	2393 (3.79)	811 (1.28)	11011 (17.45)	48889 (77.48)
18.	2007-08	66814 (100)	2385 (3.57)	603 (0.90)	11597 (17.36)	52229 (78.17)
19.	2008-09	67076 (100)	2252 (3.36)	576 (0.86)	11759 (17.53)	52489 (78.25)
20.	2009-10	72887 (100)	2430 (3.33)	684 (0.94)	12681 (17.40)	57092 (78.33)
21.	2010-11	76072 (100)	2458 (3.23)	412 (0.54)	14756 (19.40)	58446 (76.83)
22.	2011-12	76534 (100)	2448 (3.20)	400 (0.52)	12699 (16.59)	60987 (79.69)
23.	2012-13	74872 (100)	2202 (2.94)	188 (0.25)	13860 (18.51)	58622 (78.30)
*CGR		6.40	7.20	7.20	6.81	6.38
**Sig. 'p'		.000	.000	.000	.000	.000
***R^2		.989	.540	.540	.987	.989

Source: Various Issues of Tamil Nadu - An Economic Appraisal, Statistics at a glance and Tamil Nadu Generation and Distribution Corporation Limited (TANGEDCO), Chennai – 2.
Note: the figures within the parenthesis denotes percentage to the total, #including Kadampari Pumping
*CGR denotes computed value of Compound Growth Rate
** Level of Significance at 1%
*** Computed Value of R^2

The above table reveals that the status of net electricity power availability, it clearly describes the net electricity power availability in the State of Tamil Nadu during the study period it is estimated more than 77 per cent in availability after deducting the auxiliary power consumption, sale to other states and electricity line loss of power from the main source of gross electricity power availability which accounts for remaining portion. It is also proved with statistically by the compound growth rate of 6.38 per cent during the overall period with the level of significance at One per cent and it has been conformed the calculated value of R^2 more than 0.989 per cent at during the study period in the state of Tamil Nadu.

This research paper is strongly recommended for the policy implication to have a healthy electricity power sector in the country in general and the state of Tamil Nadu in particular. They are as follows.

- The Government of Tamil Nadu should take stringent action against the power deficit by increasing the power generation by its various sources.

- The Government of Tamil Nadu have to concentrate more on tapping the wind power energy source which has a huge potential to generate power in the State.
- The net electricity power availability of the state has to improve either generating more electricity power by different sources in the state or to reduce power line loss which accounts of power considerably higher in the State.

Conclusion

To conclude from the above analysis, it clearly stated that the total electricity power status of the State not at all satisfactory level since there is more than 20 per cent of the power deficit which prevail almost all the districts in the State. It infers that the economic reform has much influence on the consumption pattern of electricity power by various stake holders in the state. It also indicate the power requirements (demand) is ever growing after economic reform period by all sectors but at the same time the power availability (supply) is far behind the requirements of the electricity power. Moreover the electricity power line loss is mounting growth realized during the study period which must be reduced by inducting the technological way out to reduce the line loss. It is quite surprise that since the state is in the crux of power deficit it involved in sale of power to the neighboring state which may be restricted. Hence the status of electricity power in the state of Tamil Nadu needs to be addressed since during the economic reform period the consumption of electricity power has spectacularly ever growing. The only way out to improve the status of electricity power in the state is badly wanted utmost intervention of the state Government with varieties of remedial measures in its hand.

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