Energy Department

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Policy Note on

Tamil Nadu Electricity Board
Electrical Inspectorate
Tamil Nadu Energy Development Agency and
Tamil Nadu Power Finance and Infrastructure Corporation

2005 - 2006

TAMIL NADU ELECTRICITY BOARD

The Tamil Nadu Electricity Board is a statutory body formed on 01.07.1957 under the Electricity Supply Act, 1948. The main objective of Tamil Nadu Electricity Board is to perform electricity generation, transmission and distribution functions in an effective manner and supply quality power to its consumers.

The total installed capacity of Tamil Nadu Electricity Board as on 31.12.2004 is 9394 Mega Watts (MW). This comprises 5381 MW of TNEB's own Projects, 1066 MW of Private Sector Projects, 2587 MW as Share from Central Sector Projects and External assistance of 360 MW. Apart from this, a total capacity of 1664 MW is available from Wind Mills in the Private Sector and 19 MW of power from the Wind Mills of TNEB. Besides this a total capacity of 275 MW is available from Co-generation plants and 31 MW from Bio-mass plants.

A maximum peak demand so far reached is 7468 MW (on 23.02.2005). The growth of energy consumption is expected to be of the order of 6% per annum. Energy consumption during 2004-05 upto December 2004 is 38,462 Million Units (MU) with a maximum daily consumption of 154.942 MU on 23.02.2005.

As on 31.12.2004 there are 1069 substations, 1.46 lakh Kms. of Extra High Tension / High Tension (EHT/HT) lines, 4.75 lakh Kms. of Low Tension (LT) lines, 1.59 lakh distribution transformers and 169.10 lakh service connections.

I. CAPACITY ADDITION IN GENERATION:

To meet the increase in demand, TNEB has planned to augment its generating capacity to 2408.8 MW and correspondingly to expand the transmission and distribution system during the X Plan period (2002-07).

During the year 2004-05, under the Central Sector, the third 500 MW unit was commissioned at Talcher Super Thermal Power Station, Stage-II, by National Thermal Power Corporation (NTPC), from which TNEB is availing a share of 135 MW. Another 135 MW will be available as our share from the 4th and final unit of 500 MW capacity at the NTPC station at Talcher. Apart from this, the 500 MW Ramagundam Super Thermal Power Station Stage – II of NTPC will come into commercial operation this year from which a share of 118 MW will be added to the TNEB Grid.

In the year 2004-05, the generating capacity from State and Private Sector is to be increased by 263 MW (State Sector-150 MW and private sector - 113 MW). In the State Sector, Pykara Ultimate Stage Hydro Electric Project with a capacity of 150 MW at a cost of Rs.383 crores will be commissioned in Nilgiris District. In the Private Sector 113 MW gas based project at Karuppur in Thanjavur District by M/s.Aban Power Company will be commissioned during 2004-05.

During 2005-06, under State Sector, the Bhavani Kattalai Barrage-I Hydro Electric Project with a capacity of 30 MW at a cost of Rs. 195 Crores will be commissioned in Erode District. In the Private Sector the 53 MW gas based project at Valantharavi in Ramanathapuram District by M/s.Arkay Energy Ltd. will be commissioned during 2005-06.

II. POWER SUPPLY POSITION IN 2005-06

The power position in the State is being efficiently handled without any power cut/ load shedding by maximizing thermal generation, purchasing additional power from Kayankulam Gas based Station and Eastern Region Power Stations and from Independent Power Projects on Merit Order Dispatch basis and by judicious utilization of precious hydel storage by effective load management.

The thermal power stations of TNEB continue to perform well. Mettur, Tuticorin and North Chennai thermal power

stations have got the Gold medal from Government of India for their best performance in the years 2001-2002, 2002-2003 and Mettur and Tuticorin Thermal Power Stations have got the Gold medal from Government of India for their best performance in the year 2003-2004.

The hydro electricity storage position as on 31.12.2004 including Mettur is 1816 MU, which was only 787 MU on the same day last year. With the better availability in hydro front, it is proposed to generate 4500 MU electricity in 2004-05 as against 2067 MU electricity in 2003-04.

The anticipated demand during 2005-06 will be 8453 MW. Average daily consumption of electricity is expected to be 145 Million Units. The increased demand will be met from the existing generating capacity and from the proposed capacity additions.

The outlay for the X Plan period (2002-07) is Rs.8000 Crores. The proposed Capital Outlay for 2005-06 is Rs.1495.30 Crores. The break up under various heads are as follows:

Rs. in Crores

S.No	Description	X Plan Outlay (2002-07)	Outlay for 2005-06
1.	Generation	1212	115.00
2.	Renovation & Modernisation	364	61.65
3.	Transmission &	5914	1003.87

	Distribution		
4.	Rural Electrification	490	100.50
5.	Survey & Investigation	20	2.50
6.	Interest During Construction		211.78
	TOTAL	**8000**	**1495.30**

Under Transmission & Distribution network, it is programmed to add 60 new substations of various voltage categories and around 800 Circuit Kms. of EHT lines during the year 2005-06. During the X Plan period, it is programmed to establish 315 new substations and erect 4000 Circuit Kms. of EHT lines.

III. TRANSMISSION AND DISTRIBUTION IMPROVEMENTS

1. ACCELERATED POWER DEVELOPMENT AND REFORMS PROGRAMME (APDRP) :

25 Sub-Transmission and Distribution Improvement Schemes under Accelerated Power Development and Reform Programme (APDRP) covering four Chennai Metropolitan circles, five Distribution Circles and 19 Urban areas in 9 Distribution circles at a cost of Rs. 977 Crores are under execution. Expenditure upto 31.12.2004 is Rs.462.89 Crores. The Schemes are scheduled for completion by 31.03.2005.

Apart from this, new schemes covering the remaining 54 Municipal Towns in 20 Districts at a cost Rs.40 Crores have been sent to Ministry of Power, Government of India for sanction

under Accelerated Power Development and Reforms Programme (APDRP) for execution from 2005-06.

2. NATIONAL AGRICULTURAL BANK FOR RURAL DEVELOPMENT (NABARD) SCHEMES:

Under Rural Infrastructure Development Fund IX, NABARD has sanctioned loan assistance to the tune of Rs.63.48 Crs. covering 5 Districts viz., Dharmapuri, Tirunelveli, Kanyakumari, Thoothukudi and Karur with the scheme period completion by 2005-06. Against this the expenditure upto 31.12.2004 is Rs. 16.21 Crores. The balance amount of Rs.47.27 Crores will be spent by 31.03.2006.

Besides this, 20 Schemes covering 19 Districts with an estimated cost of Rs.327 Crores will be executed with financial assistance from National Bank of Agriculture and Rural Development (NABARD) under Rural Infrastructure Development Fund X or Power Finance Corporation (PFC).

3. RURAL ELECTRIFICATION CORPORATION ASSISTED SCHEMES:

Rural Electrification Corporation provides loan assistance for line loss reduction schemes under a five year implementation period from 2003-04 onwards. Schemes for line loss reduction have been sanctioned in respect of following Circles :

Circle	**Scheme Cost (Rs. in Crores)**
1.Coimbatore (North)	87.86
2.Trichy (North)	138.92
3.Dindigul	109.35
4. Madurai	75.64
Total	411.77

Against this, an expenditure of Rs. 45.78 Crores has been incurred up to 31.12.04.

4. PRIME MINISTERS' GRAMA YOJANA (PMGY) :

The following schemes are also under execution and expenditure made as on 31.12.04 is furnished:

Sl. No	Scheme	No. of hamlets involved	No. of hamlets electrified	Expenditure upto 15.01.05 (Rs.in lakhs)
1.	Namakkal District – Phase-I	21	21	161.34
2.	Namakkal District – Phase-II	7	7	159.89
3.	Salem District	20	20	128.33
4.	Villupuram District	12	12	94.93
5.	Dharmapuri District	55	54	123.23
	Total	115	114	667.72

5. DEVELOPMENT IN CHENNAI METROPOLITAN AREA:

During 2005-06, it is programmed to undertake various improvement works in Chennai Metropolitan Area at a cost of Rs. 596 Crores. This will cover establishment of substations and linking of major substations through High Voltage cables and conversion of High Voltage and Low Voltage Over Head lines into Under Ground cables in Corporation and Urban areas.

IV. GENERAL

1. COMPUTERISATION OF LOW TENSION BILLING AND COLLECTION

For easy payment of electricity bills by the consumers, computerisation of Low Tension Billing and Collection will be completed in Chennai city and in all Municipal Corporations and Municipalities by 31.03.2006 at a cost of Rs.120 Crores.

2. COMPUTER BASED POWER FAILURE REDRESSAL CENTRES :

Computer based power failure redressal centre which has been successfully implemented in Chennai has been extended to Corporations of Coimbatore, Madurai and Trichy at a cost of Rs.73 lakhs. It has also been programmed to extend this facility to Salem, Tirunelveli, Erode and Nagercoil.

ELECTRICAL INSPECTORATE DEPARTMENT

Introduction and Administration:

Electricity is a subject included in the concurrent list of Constitution of India. The Electricity Act, 2003 (Act 36 of 2003) has been enacted repealing the Indian Electricity Act, 1910, the Electricity Supply Act, 1948 and Electricity Regulatory Commission Act, 1998. The said Electricity Act, 2003 has come into force with effect from 10th June 2003.

The Electrical Inspectorate Department was created in September 1961 as separate Department with Chief Electrical Inspector as its Head of the Department. After the formation of Energy Secretariat Department on 1.8.93, it has come under the administrative control of the Energy Department.

Functions :

The Electrical Inspectorate Department is entrusted with the following duties and functions :-

1) Carrying out inspections and other services under Indian Electricity Rules 1956, till regulations are made under the Electricity Act, 2003 (Act 36 of 2003).
2) Tamil Nadu Lifts Act, 1997 and Tamil Nadu Lifts Rules 1997.
3) Duties specified in Tamil Nadu Cinemas (Regulation) Rules 1957, in respect of Electrical installation of Cinema Houses.

4) Functions as Member of Technical Committee Bureau of Indian Standards, which makes Indian standard specifications in Electro Technical Field.
5) The Chief Electrical Inspector to Government, has to function as Ex-Officio President of the Tamil Nadu Electrical Licensing Board constituted under Rule 45 of the Indian Electricity Rules, 1956.
6) The Chief Electrical Inspector to Government has to function as the Ex-officio President of the Government Board of Examiners for Cinema operators constituted under Tamil Nadu Cinema (Regulation) Rule, 1957.

FUNCTIONS UNDER THE INDIAN ELECTRICITY RULES 1956 :

1) Approval of High and Extra-High Voltage Electrical installations and periodical inspections of Generating Companies, Tamil Nadu Electricity Board and High Tension consumers under Rule 46 of Indian Electricity Rules 1956.

2) On receipt of intimation of all electrical accidents in the generation, transmission, supply and use of energy, inspection of the accident spot and preparation of reports as per Rule 44A of Indian Electricity Rules, 1956.

TAMIL NADU TAX ON CONSUMPTION OR SALE OF ELECTRICITY ACT & RULES, 2003

This Act has come into force on and from 16.6.2003 repealing the existing Tamil Nadu Electricity (Taxation on consumption) Act 1962 and Tamil Nadu Electricity Duty Act, 1939.

As per the Act:

a. 10 paise tax per unit on self-generated consumption of electrical energy.
b. Levying 5 percent tax of the net charge on Electricity sold by the Tamil Nadu Electricity Board or by any other licensee.
c. Following categories of consumers are exempted from the levy of the above tax : -

1) For Government consumption
2) Railway Administration
3) Any Local Authority
4) Energy sold by Tamil Nadu Electricity Board or any other Licensees for the use of domestic, huts and agriculture purpose.

STANDARDS LABORATORY AND MOBILE LABORATORIES: -

There is a Government Electrical Standards Laboratory at Guindy, Chennai. There are mobile Electrical testing Laboratories in Chennai, Salem, Thirunelveli, Madurai and Trichy.

In 2005-2006, under Part II Schemes a sum of Rs.15.00 lakhs has been allotted for implementation of "**e-governance"** at Electrical Inspectorate Department.

TAMIL NADU ENERGY DEVELOPMENT AGENCY,

Introduction:

Tamil Nadu Energy Development Agency (TEDA) was set up in 1985, to develop and promote renewable energy sources in Tamil Nadu. With a view to encourage the public to use alternative sources of energy, the Agency is implementing various schemes with the assistance of Government of Tamil Nadu and Government of India. As a result of various efforts taken, the use of renewable energy has increased considerably in Tamil Nadu. The total installed capacity of power from renewable sources (excluding small Hydro power) as on 31.12.2004 is 1842 MW, which is 16.5 % of the total grid capacity of TNEB, whereas the All India average is 4.5% only. Thus, Tamil Nadu continues to be No.:**1** State in the country in power generation from renewable energy sources.

Renewable energy sources:

Wind energy, solar energy, Biomass and other forms of bio energy, Tidal energy, Fuel cell, Ocean-Thermal energy and Geo-thermal are the important among renewable energy sources. Among these sources, though the first three renewable energy sources, namely, Wind, Solar & Bio energy are being harnessed in a big way in India and in Tamil Nadu, the other sources have not yet reached a stage of commercial exploitation.

Renewable energy under Hon'ble Chief Minister's 15 point programme :

Various efforts are being taken for the promotion of renewable energy under Hon'ble Chief Minister's 15-point programme:

Under point 15 (vii) above, the Government has issued orders making the use of solar water heating mandatory for certain type of new buildings in Chennai and other urban areas/towns as per G.O.Ms.No.112, Municipal Administration and Water Supply (MAI) Dept, dt.16.8.2002 covering all districts and Municipal Corporations in the State and G.O.Ms.No.277, Housing and Urban Development (UDI) Dept, dt.14.11.2002 covering Chennai Metropolitan areas. TEDA has communicated necessary guidelines to CMDA and other enforcing agencies for implementation of the provisions.

Under Point 15(ix) :

(a) Government has taken up electrification of remote habitations not connected to the grid, using solar PV systems.

(b) As per Government's policy, to promote biomass based power projects TEDA has recommended 37 biomass based power projects for a capacity of 259 MW upto 31.12.2004 for issue of consent by TNEB. Of these, consent has been issued by TNEB for 15 projects for a total capacity of 145.5 MW.

(c) The Government is also encouraging local bodies to install SPV street lights from 2003-2004, 3387 SPV street lights are being installed.

(d) Government is assisting industries to install Biomass gasifiers for thermal and electrical usage. Till 31.3.2004, Government of India sanctioned 11 schemes, which are under implementation.

RENEWABLE ENERGY SCHEMES:

I. WIND ENERGY:

1. 1 Wind Assessment Studies and Demonstration of Wind Farms:

Wind Assessment studies were conducted to identify places having wind speed of more than 18 kmph. Based on the study, Demonstration wind farms for a total capacity of 19 MW were set by Tamil Nadu Electricity Board in stages from among the 41 identified places. Following this starting from the first private sector wind farm in Tamil Nadu during 1990, large numbers are being installed.

1.2. Growth in Investment from Private sector:

Wind power projects at the capacity of 1664 MW as on 31.12.2004 have been set up in 20 areas through private sector. This constitutes more than 50% of the installed capacity in the country. Though the target fixed for Tenth Five Year Plan (2002-2007) is 500 MW, total additional capacity made in the first three years (April 2002 to Dec.2004) is 807 MW. This achievement is possible because of consistent and investor friendly policies followed by the Government.

1.2.1. Sale of power to TNEB / Captive consumption

The investors, who generate electricity from the wind farms, can sell the power so produced to TNEB @ Rs.2.70 per unit or use the same for captive consumption in their industries subject to certain terms and conditions. The investors of the Wind Mills can avail of wheeling facilities by which the power generated from windmills can be used in other places in the State on payment of 5% as wheeling charges to TNEB. Further, they can avail of banking facilities for their power generated during a few months for using it throughout the financial year on payment of additional charges at 5% to TNEB.

1.3. Wind mill water pumps

Small windmills are installed in places where wind speed is less than 18 kmph and are used for lifting water from open wells or bore wells. Since inception, 875 windmills have been installed till March 2004, with financial assistance from State Government and Government of India. TEDA will obtain central financial assistance upto 50% of the cost for windmill water pumping systems of 1 HP capacity from MNES.

2. SOLAR ENERGY

Solar energy can be harnessed in two ways namely (i) for producing electricity meant for lighting and other electrical applications and (ii) for making hot water or for drying

agricultural produce and processing industrial products and for cooking purposes.

2.1. Solar Photovoltaic system

2.1.1. Solar photovoltaic devices

Solar photovoltaic (PV) devices can be used for meeting the needs of home lighting, office lighting and street lighting and are promoted in the State under scheme for providing subsidy at 50% of the cost from MNES. Local bodies can go in for SPV street lighting and reduce current consumption charges. The entire allotment of 3387 SPV street lighting systems sanctioned by MNES are being installed in 508 Panchayats in 28 districts in the State and 6 Municipal Corporations. The entire 500-Nos. SPV home lighting systems were also allotted for installation in Group houses under construction by Rural Development Dept. in 10-districts and individual users. Completion reports have been received for 3124 SPV Street lights and 355 of SPV home lights till 31.1.2005. MNES has extended the time upto 31.03.2005 for completion of balance works. Reports regarding installation of balance SPV lights are expected shortly. Tamil Nadu Energy Development Agency has also prepared and sent special project proposals for 7500-Nos. SPV Street lights and 7950-Nos. SPV home lights. Sanction is awaited from MNES.

2.1.2.Electrification of remote habitations

As per Government's objective of electrifying all the habitations in the State by 2005, the Government has approved a scheme for electrification of 152 remote habitations, not connected to grid, under phase-I using solar PV systems. The revised estimated cost of providing solar lighting systems for remote habitations is Rs.9.45 crore, which has since been sanctioned by MNES with central financial assistance upto 90% of the cost under the scheme (Phase - I) for electrification of un-electrified habitation in electrified census villages. Balance 10% cost will be borne by the State Government.

Only one of the MNES empanelled list of firms have come forward to execute the scheme at MNES rates. The empanelled manufacturers/suppliers approved by MNES have been addressed and asked to communicate their willingness to implement the scheme. Further action will be taken to implement the scheme on receipt of reply from them. Further, TEDA took up detailed survey of the balance of un-electrified habitations and has submitted proposals to MNES to cover 106 more habitations under Phase II. It's sanction is awaited.

2.2. Solar Thermal Energy

2.2.1. Solar water heating system

Water heating can be done by using solar thermal energy in houses, lodges and hospitals. Government of India extends subsidy to this scheme. After the discontinuance of subsidy by

Government of India, the State Government extended subsidy for installation of solar water heating system in some of the institutions including Government hospitals, hostels etc. With the amount of Rs.11.94 lakhs sanctioned by State Government for 2003-04, subsidy was provided for 10-Nos. of 1000 LPD systems installed in other institutions and 12-Nos. of 500 LPD systems were installed with full cost in Government institutions. For the year 2004-05, Government has sanctioned Rs.15.00 lakhs for installation of 24-Nos. of 1000 LPD systems under subsidy and 12-Nos. of 500 LPD systems in Government Institutions with full cost. The scheme is under implementation.

2.2.2. Solar air heating system

The technology for using solar thermal energy for drying grains, tea, fruits, leather, etc was first developed and used in Tamil Nadu which has become viable for certain types of drying and air heating applications. To encourage its use further, the Government of Tamil Nadu sanctioned an amount of Rs.4.61 lakhs for providing subsidy for drying of various products, for a total capacity of 440 m² during 2003-04. Two systems for a total capacity of 168 m^2 have been installed. The balance of works is under implementation.

2.2.3. Solar cookers:

Box type solar cooker is meant for cooking for 4 to 5 persons, using solar thermal energy. It is now promoted through soft loan scheme of Banks. But, dish type cookers for 10 to 15 persons and steam cooking for more number of persons using solar thermal energy have also been developed. MNES, GOI provides subsidy upto 50% of cost.

3. BIOMASS AND OTHER BIO ENERGY SYSTEMS

The scheme for producing gas and electricity from biomass and other bio waste and meet the energy requirements of industries or for export to grid are being implemented in Tamil Nadu.

3.1. Co-generation

The scheme for producing steam from bagasse high pressure boilers in sugar mills and generating electricity for export of surplus power to TNEB and using the low pressure steam after power generation for process has been successfully implemented in Tamil Nadu. With a total installed capacity of 275 MW as on 31.12.2004, (with exportable surplus of 165-MW) Tamil Nadu is leading in the country.

3.2 Biomass based power generation

Government of Tamil Nadu encourages production of electricity by utilizing fire wood, other agricultural wastes and

unused perishables (vegetables). A 12 MW capacity biomass based power project was commissioned at Palayaseevaram (Kancheepuram District). Approval has been given for increasing it to 18 MW.

As part of Government objective to promote biomass power projects based on Taluk level based biomass potential assessment study already conducted, applications were invited for new projects. In response 109-applications were received for setting up such projects in the State. A Technical Sub-Committee constituted for the purpose, selected 37-applications for a total capacity of 259 MW and recommended to TNEB for issue of necessary consent / concurrence. TNEB has issued consent letters for 15-projects for a total capacity of 145.5 MW. One project of 20-MW near Paramakudi has started functioning from 2004-05. The other projects will be commissioned in stages.

3.3. Biomass Gasifiers

Tamil Nadu Energy Development Agency encourages installation of biomass gasifier systems to meet thermal and electrical energy required for industries and other Institutions. MNES extends subsidy at 10% for thermal applications and 50% for electrical applications using 100% producer gas engines. The use of gasifier is advocated wherever diesel, furnace oil or LPG are presently used as primary fuel for various thermal applications.

As on 31.12.2004, 26 gasifiers (thermal) of total capacity of 3400 Kwe and 11 gasifiers (electrical) of total capacity of 1686 Kwe were installed. Further 3 thermal (450 Kwe) systems and 7 electrical (2357 Kwe) systems sanctioned by MNES are under implementation.

State Government has also sanctioned for the year 2004-05 Rs.12.00 lakhs for providing additional subsidy for 14-Nos. 20 Kwe gasifier electrical for six local bodies @ Rs.1.00 lakh and for eight other Institutions @ Rs.75,000/-; and Rs.7.50 lakhs for 7-Nos. gasifier (thermal) for Noon meal centers in five Schools @ Rs.1.2 lakhs and in two other institutions @ Rs.75,000/- totaling to Rs.19.50 lakhs.

3. 4. Toilet linked biogas plants

Biogas plants have been installed in large numbers in Tamil Nadu. Based on the pilot schemes implemented in Kolathur (Salem), Perunthurai (Erode) and Periakulam (Theni). Government of Tamil Nadu sanctioned and released a sum of Rs.43.5 lakh in 2003-04 for setting up Toilet-linked biogas plants of 10 m^3/25m^3 capacities in Tamil Nadu. Under this scheme 16-Nos. of 25 m^3/35 m^3 capacity plants, two of 15 cum plant and 36-Nos. of 10 cum plants are installed in educational institutions and village Panchayats.

4. OTHER SCHEMES:

4.1 Power generation from Waste:

Project for producing gas and electricity from tapioca waste water in Pappireddipatti (Dharmapuri district) has been completed and the trial run is in progress. Scheme for power generation from poultry waste in Namakkal district has been completed and power will be generated shortly. The Govt. of India have sanctioned financial assistance for a project to generate electricity from the vegetable waste available in Koyambedu wholesale vegetable Market, Chennai. The scheme is implemented for Chennai Metropolitan Devopt. Authority.

4.2. Battery Operated Vehicles

The vehicles running on batteries have been developed and are in use, which help control pollution by reducing of noxious emissions from petrol and diesel vehicles. The eligible institutions/organizations using these vehicles are given subsidy upto 33% of the cost of vehicles by MNES, Government of India. These vehicles can be used in wild life sanctuaries, tourist centers, hospitals etc. In Tamil Nadu subsidy has been provided so far to 27 vans and 2 autorickshaws.

4. 3 Publicity and awareness programmes:

TEDA has been organizing seminars and exhibitions to extend the use of renewable energy and promote energy conservation among industries and other institutions besides

taking part in programmes organized by other agencies. TEDA has intensified its publicity activities by conducting District level awareness seminars for the benefit of representatives of local bodies, industrialists, NGOs, etc. During 2003-04, TEDA organized such seminars in 14 districts and another 10 Districts were covered during 2004-05. TEDA has also organized 2 seminars on the uses of renewable energy sources for specific user groups of industries during 2004-05. Three exhibitions were also conducted by TEDA.

Further, in 2004-05, Government has sanctioned Rs.7.00 lakhs to provide Solar educational kits to 230 Government Higher Secondary Schools with 50% subsidy to create awareness among school students about the various uses of solar energy. The scheme is under implementation.

4.4 Modified IREP :

The Government of India (MNES) has modified the Integrated Rural Energy Programme (IREP) and extended it to cover all the rural districts, excluding urban areas falling within notified municipal limits. The scheme provides for setting up State level cell at TEDA and one District level cell for each District under the District Rural Development Agency (DRDA). The programme will focus on select clusters of villages with

100% coverage to adopt efficient use of traditional energy sources locally available in the villages and promote the use of easily available non-conventional energy sources.

Further, local Panchayats will be involved in the preparation of village energy plans, implementation, repair and maintenance of energy systems and devices, etc. Training facilities will also be arranged for the nominees of Panchayats. The Government of India provides Rs.5.0 lakh for the State cell and Rs.10.0 lakh for each district cell subject to matching grant by the State Government towards the cost of implementing the scheme. The scheme is expected to be approved by State Government soon and is expected to be implemented from 2005-2006.

4.5. Providing Renewable energy devices for tsunami victims

As a solace to the tsunami affected people in the districts of Nagapattinam, Cuddalore, Kanyakumari, Tirunelveli, Thoothukudi, Villupuram, Tiruvellore, Kancheepuram and Chennai 4000 Solar lanterns have been sanctioned and are under distribution. 500 Nos. Dish solar cookers and 4000 Nos Box type solar cookers have been proposed to by MNES, Government of India and sanction is awaited soon.

4.6 Government has also sanctioned Rs.4.00 lakhs for preparation of detailed project reports for sustainable energy security systems in Salem and Coimbatore districts. The work has been entrusted to Anna University.

5. New Schemes for 2005-06

5.1 Schemes proposed under Part II

The Government has proposed to sanction a total outlay of Rs.205.94 lakhs for the implementation of the following new schemes during 2005-06**:**

S.No.	Scheme		Total outlay proposed to 2005-06 (Rs. in lakhs)
1.	Wind Energy		
	(a)	Micro survey of potential sites for wind mills 3-Nos.	6.00
	(b)	State share (20%) of cost for new wind monitoring stations 3-Nos.	4.50
2.	Solar Water Heating Systems (SWHS) :		
	(a)	SWHS to institutions / industries - subsidy and other charges @ Rs.25000+2500 (20-Nos. 1000 lts)	5.50
	(b)	SWHS to Government Hospital / Hostels / Institutions(5-Nos.1000 ltrs. or 10-Nos.500 ltrs.)	7.50
3.	Solar air heating system (SAHS) for fish/food processing industrial applications subsidy etc @ Rs.1550/- (400 sq.m)		6.20

4.	Solar PV system for Police Traffic /Wireless Systems :		
	(a)	Solar Traffic signal system (LED) display full cost panel + battery State subsidy @ Rs.1.5 lakhs (5-Nos.)	7.50
	(b)	Solar PV battery system for police wireless communication - full cost excluding batteries (5-Nos.)	12.50
5.	Solar Educational kits to Government Higher Secondary Schools - subsidy and other charges @ Rs.3700/- (250-Nos.)		9.25
6.	Assistance to R&D projects through Anna University (3-Nos.) (TEDA share 50%)		20.00
7.	State level energy park balance cost of civil works		10.00
8.	Village Energy Security System @ Rs.2.00 lakhs per habitation State share 10% (centrally sponsored scheme) 10-Nos.		20.00
9.	Biomass gasifier for water pumping / street lighting etc, in weaker Panchayats - State share for 50% after availing CFA from MNES 29-village Panchayats (VP) in various districts		46.40
10.	Electrification of 106 remote habitations using SPV lighting systems under Phase II		50.59
	Total		**205.94**

2. Hill Area Development Programme:

Under Hill Area Development Programme (HADP), the Government has sanctioned 5-schemes at an outlay of Rs.54.00 lakhs for 2004-2005. These are under implementation through

Project Director, Hill Area Development Programme with technical assistance from TEDA.

Further, schemes at an outlay of Rs.60.00 lakhs have been proposed for 2005-06 for installing renewable energy devices / equipments.

3. Western Ghats Development Programme:

Under Western Ghats Development Programme (WGDP) for 2004-2005, Biomass gasifiers, SPV pumps, SPV street lights have been sanctioned for Coimbatore, Tirunelveli and Kanyakumari Districts at an outlay of Rs.30.0 lakhs for 2004-05. They are under implementation through Project Officer, District Rural Development Agencies. Further, an allocation of Rs.50.00 lakhs has been sought under WGDP for 2005-06 to implement renewable energy schemes.

TAMIL NADU POWER FINANCE AND INFRASTRUCTURE DEVELOPMENT CORPORATION LTD.

The Tamil Nadu Power Finance and Infrastructure Development Corporation Limited (Power Finance) was established on 27.6.1991. The Corporation is registered with Reserve Bank of India as a Non Banking Finance Company. The objective of the Corporation is to mobilise funds for the Power Sector in Tamil Nadu, particularly the schemes for generation, transmission and distribution of power by Tamil Nadu Electricity

Board. The authorised share capital of the Corporation is Rs.50 crores and the Paid up Share Capital as on date is Rs.22 crores.

FIXED DEPOSITS:

Concern and care for the customers and consistent profits have considerably expanded the deposit base over the last decade besides leaving an indelible imprint in the minds of the investors. This has resulted in the substantial growth of deposit base of Rs.2.09 crores in 1991-92 to Rs.1,715 crores as on 31.12.2004 and the number of deposits from 816 in 1991-92 to 1,01,635 deposits as on 31.12.2004.

In particular during the period from May 2001 to December 2004, a sum of Rs.958 crores has been mobilised as net deposits and the number of deposits added is 41,595. Especially during 2004-05 (upto December 2004), the Corporation has mobilised a sum of Rs.240 crores and the number of deposits added is 3385.

FINANCIAL ASSISTANCE:

The funds mobilised by Power Finance are being utilised to finance TNEB for electricity generation / transmission / distribution and other activities. The total financial assistance provided to TNEB since inception is Rs.4,589 crores and the net loan outstanding from TNEB is Rs.2,092 crores as on 31.12.2004. In addition to the above, a sum of Rs.32 crores loan has been provided to other Corporations like the Poompuhar Shipping

Corporation Ltd., Tamil Nadu Industrial Investment Corporation Ltd., etc.

During 2004-05 (upto Dec.2004), the Corporation has financed a sum of Rs.692 crores (including Rs.672 crores to TNEB) by way of hire purchase and long-term loan. After adjusting the repayments, the net financial assistance is Rs.297 crores (including Rs.280 crores to TNEB).

MANAGEMENT OF GOVERNMENT SCHEMES:

So far a sum of Rs.38 crores including 8 crores in 2004-2005 upto December 2004 has been received as deposit under "Girl Child Protection Scheme" introduced by the Hon'ble Chief Minister of Tamil Nadu for 25,064 (5,093 during the current year upto Dec. 2004) girl children. So far a sum of Rs.24 crores inclusive of Rs.14 crores in 2004-2005 upto December 2004 has been received covering 9,643 temples inclusive of 5,613 upto Dec.2004 in 2004-2005 under the "Oru Kala Pooja Scheme".

PROFITABILITY & DIVIDEND:

The Corporation has been making profit consistently since its inception. It is also paying to the Government dividend at 20% on its Paid up Share Capital continuously for the past nine years since 1995-96. The Corporation is expected to earn net profit of Rs.25 crores after tax during 2004-2005.

FRESH INITIATIVES:

1. Mobilise a sum of Rs.300 crores as net deposits from public and institutions and

2. Provide financial assistance of Rs.750 crores for power and infrastructure projects.

R. VISWANATHAN
MINISTER FOR TRANSPORT
AND ELECTRICITY