

page 1

# CLEAN DEVELOPMENT MECHANISM PROJECT DESIGN DOCUMENT FORM (CDM-PDD) Version 03 - in effect as of: 28 July 2006

# CONTENTS

- A. General description of <u>project activity</u>
- B. Application of a <u>baseline and monitoring methodology</u>
- C. Duration of the project activity / crediting period
- D. Environmental impacts
- E. <u>Stakeholders'</u> comments

#### Annexes

- Annex 1: Contact information on participants in the <u>project activity</u>
- Annex 2: Information regarding public funding
- Annex 3: <u>Baseline</u> information
- Annex 4: Monitoring plan

#### **Appendices**

- Appendix 1: Project's Contribution to Sustainable Development
- Appendix 2: Abbreviations
- Appendix 3: WTG Identification, Location and HTSC Number



page 2

#### SECTION A. General description of project activity

#### A.1 Title of the <u>project activity</u>:

>> Bundled Wind power project in Tamilnadu, India co-ordinated by the TamilNadu Spinning Mills Association (TASMA)

Version 11.0 2011-03-04

## A.2. Description of the <u>project activity</u>:

#### >>

This project involves grouping of 704 wind turbines. The small wind mill sub project owners, who operate spinning mills, have invested into wind energy generation encouraged by their Association - Tamil Nadu Spinning Mills Association (TASMA). The generated wind power is used for meeting their captive needs and for exportation to the grid. All the wind mills are connected to the grid of the Tamil Nadu Electricity Board (TNEB) / Southern Grid; situated within the State of Tamilnadu, micro-sited in many locations based on wind availability.

This wind based electricity generation aggregates to a total Installed capacity of 467.79 MW and the generation is expected to be approximately 860 GWh, annually.

The project activity consists of many individual sub projects with different ownerships, all of which are members of the Tamil Nadu Spinning Mills Association. The association TASMA has promoted and continues to promote the adoption of wind energy generation for its members to meet their own needs. TASMA has demonstrated to its members that the wind energy generation is viable keeping in mind the CDM revenue. TASMA also has been authorised by its members, present project activity sub project owners, to develop the wind energy generation activities as CDM projects.

The project activity generates 860 GWh of power using wind energy through wind turbine technology, enabling displacement of thermal energy.

The project owners either sell electricity to TNEB or consume the energy at their mills under Power Purchase Agreements executed between individual owners and TNEB. All the windmill systems have been commissioned.

The novel feature of this project activity of TASMA is that it could bring together, a number of investors with small power requirements (who otherwise would have chosen to draw power from the grid) to invest into wind turbines as:

- They could gain negotiating capacity with the suppliers;
- Infrastructure support could be procured easier;
- Resources to obtain CDM benefits and power purchase agreements could be pooled.

#### The Significant Contributions by the project activity towards sustainable development are:

- Reduction in emission of Green House Gases
- Increase the contribution of renewable energy to the Southern Grid/Tamil Nadu Electricity Grid of India.
- Encourage Industries to contribute to Green Power Development and CDM



page 3

- Reduction in procurement and use of diesel based power generation sets as power option by project participants
- Overall Rural development
- Capacity addition to installed capacity of Southern Grid, filling up the ever-growing gap between power supply and demand
- Generation of additional employment especially for windmill operations/ maintenance security etc.

#### A.3. <u>Project participants</u>:

#### >>

The Tamilnadu Spinning Mills Association (TASMA) is the Primary Project Sponsor. The members of the Association are the owners of the wind turbines that are bundled in this project activity.

TASMA is registered as a society under TamilNadu Societies' Registration Act 1975, and rules and regulations therein govern its functioning. TASMA started in the year 1997, with a small group of 36 spinning mills from the Dindigul District of Tamilnadu, with the purpose of catering to multifarious business needs of spinning mills from a common platform. Today, the Association has grown to a strength of 303 mills having effective interfaces with Government, Business Houses, NGOs, and Overseas Bodies. The Association specifically interacts with organizations like the Tamilnadu Pollution Control Board, the Tamilnadu Electricity Board (TNEB), Labour Department, Export / Import, Ministry of Industries, etc.

TASMA promotes best practices among its members which includes green practices such as wind based electricity generation and energy efficiency. Thus, TASMA has brought together the mills for establishing wind energy generation keeping in mind the potential CDM benefits. The promotion activity has been enabled through various meetings and presentations organised with the help of wind turbine (WTG) manufacturers. Subsequently, TASMA has been authorised by its members to act as the aggregator of the sub–projects of the CDM- Project activity and to represent the owners during the CDM project development and subsequent issuing and contracting.

TASMA has entered into an agreement with Carbon Asset Services Sweden AB, and this entity will also be a project participant. The respective parties i.e. the Government of India and the Government of Sweden have approved the project.





page 4

The list of project participants is:

Name of the Party involved (*) (host)indicates a host party)	Private and/or public entity (ies) Project Participants (*) (as applicable)	Kindly indicate if the party involved wishes to be considered as project participant (Yes/NO)			
Government of India (Host Party)	Tamilnadu Spinning Mills	No			
	Association – TASMA				
		No			
Government of Sweden	Carbon Asset Services Sweden AB				
(*)In accordance with the CDM modalitie	es and procedures, at the time of making	the <b>CDM-PDD</b> public			
at the stage of validation, a Party involve	ed may or may not have provided its ap	proval. At the time of			
requesting registration, the approval by the party (ies) involved is required.					
Note: When the PDD is filled in support of a proposed new methodology (forms CDM-NRM and CDM-					

**Note:** when the PDD is filled in support of a proposed new methodology (forms CDM-NBM and CDM-NMM), at least the host Party (ies) and any known project participant (e.g. those preparing a new methodology) shall be identified.

The details of sub projects are given in Appendix - 3

# A.4. Technical description of the <u>project activity</u>:

#### A.4.1. Location of the <u>project activity</u>:

>>

A.4.1.1. <u>Host Party(ies):</u> >> The Host party is the Government of India (GOI)

	A.4.1.2.	<b>Region/State/Province etc.:</b>	
>> Tamilnadu			
	A.4.1.3.	City/Town/Community etc:	
>> Coimbatora	Timunalyali	Kanyakumari distriate of Tamilnodu	

>> Coimbatore, Tirunelveli, Kanyakumari districts of Tamilnadu

# A.4.1.4. Detail of physical location, including information allowing the unique identification of this <u>project activity</u> (maximum one page):

>>The WTGs are installed in major locations at Udumalpet, Ayakudi, Aralvaimozhi in the districts of Coimbatore, Tirunelveli and Kanyakumari. These sites in these locations have been selected through the micro-siting studies and data analyses on wind availability, speed of wind, minimum speed etc. All WTGs belonging to the project activities are connected to the same grid namely TNEB, which is part of the southern grid of India. The map showing the locations of WTGs is as follows:







The details of the locations of the WTGs, with high tension service connection numbers (HTSC, for the unique identification of the location) is shown in Appendix -3.

#### A.4.2. Category(ies) of project activity:

>> The category of the CDM project activity would be –"Grid connected electricity generation from renewable sources"

Scope: Scope No 1, Sectoral Scope - Energy Industry

#### A.4.3. Technology to be employed by the <u>project activity</u>:

#### >>

# **Technology** :

The project activity has employed Horizontal Axis WTGs of different capacities. All the WTGs deployed in the project activity are from well-known international manufacturers. All these WTGs are type tested and approved by the Ministry of Non-Conventional Energy Sources (MNES), Government of India.

The turbines generate power at 400 volts, which is stepped up to 33 KVA by the local transformers. The HT transmissions are connected to service 110 KVA substations provided by TNEB.





page 6

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The plant load factor of each WTG is affected by wind availability, wind speed, and grid availability. The available locations for the turbines in this project activity do not have very good wind availability as such locations are already occupied and the grid availability is also not very good as evacuation infrastructure is inadequate at the time of investment decision. The average plant load factor of all the WTGs based on empirical data is, approximately 20.9%.

The choice of capacity of the WTG was based on,

- The power requirements of the spinning mill owners (generally about 500 KW. Most spinning mill owners do not want to generate surplus power for export to the grid);
- The availability and cost of WTGs;
- Wind Characteristics and the locations.

The sub projects covered by this project activity involve the installation of 704 WTGs with the following capacity distribution.

CAPACITY DETAILS OF WTGS				
Capacity in KW	NO of WTGs	Total Capacity in MW		
225	148	33.3		
230	6	1.38		
250	14	3.5		
320	3	0.96		
350	4	1.4		
500	118	59		
600	54	32.4		
750	215	161.25		
800	10	8		
850	5	4.25		
1250	118	147.5		
1650	9	14.85		
Total	704	467.79		



page 7

Distribution of WTGs based on capacity and supplier				
Make	NO	Unit Capacity- KW	Total Capacity - MW	
ABB	1	750	0.75	
BONUS	3	320	0.96	
ENERCON	6	230	1.38	
ENERCON	54	600	32.4	
ENERCON	10	800	8	
GAMESA	4	850	3.4	
NEG MICON	1	250	0.25	
NEG MICON	209	750	156.75	
NEG MICON	9	1650	14.85	
NEPC	136	225	30.6	
NEPC	4	750	3	
PIONEER	11	250	2.75	
PIONEER	1	850	0.85	
PIONEER WINCON	2	250	0.5	
SIEMENS	1	350	0.35	
SIEMENS	1	1250	1.25	
SUZLON	3	350	1.05	
SUZLON	117	1250	146.25	
VESTAS	11	500	5.5	
VESTAS-RRB	12	225	2.7	
VESTAS-RRB	107	500	53.5	
VESTAS-RRB	1	750	0.75	
Total	704		467.79	

# A.4.4 Estimated amount of emission reductions over the chosen <u>crediting period</u>:

>>

Years	Annual Estimation of Emission in tonnes of CO2 Eq Reduction	
2003	130 480	
2004	398 896	
2005	726 960	
2006	801 520	
2007	801 520	
2008	801 520	
2009	801 520	





page 8

2010	801 520
2011	801 520
2012	801 520
<b>Total estimated reductions</b> (tonnes of CO2e)	6 866 976
Total number of crediting years	10 Years
Annual average over the crediting period of estimated reductions (tonnes of CO2e)	686 697

# A.4.5. Public funding of the <u>project activity</u>:

>>

The total funding for the project activity has come from the individual sub project owners and commercial loans availed by them.

No official development Assistance (ODA) has been used for the project.



#### SECTION B. Application of a baseline and monitoring methodology

# **B.1.** Title and reference of the <u>approved baseline and monitoring methodology</u> applied to the <u>project activity</u>:

>>

Title: Consolidated Baseline Methodology for grid connected electricity generation from renewable sources

Reference : ACM0002 Version 6 – 19/05/2006

# **B.2** Justification of the choice of the methodology and why it is applicable to the <u>project</u> <u>activity:</u>

>>

This project activity involves electricity capacity addition from wind sources, connected to the southern grid and hence satisfies the applicability condition cited above.

This project activity does not involve switching from fossil fuels to renewable energy and hence satisfies the applicability condition cited above.

The geographic and system boundaries of the T.N.E.B grid and Southern Grid are clearly identified and widely used by Electricity administrative and regulatory authorities in India. The information on the characteristics of the grid are publicly available from the Central Electricity Authority. Hence this project activity satisfies the applicability condition cited above.

#### B.3. Description of the sources and gases included in the project boundary

>>

The spatial extent of the project boundary comprises of all the power plants connected to the Southern grid of India. The schematic diagram of project boundary is as follows:



page 10



The sources and gases included in the project boundary are as follows:

	Source	Gas	Included?	Justification / Explanation
Base Line	Emissions from	CO <sub>2</sub>	Yes	Main source of emission
	the power plants connected to the	CH <sub>4</sub>	No	Not considered. This is conservative
	southern grid of India	N <sub>2</sub> O	No	Not considered. This is conservative
Project Activity		CO <sub>2</sub>	No	As per ACM0002, project emission is not be considered for a wind project
		CH <sub>4</sub>	No	As per ACM0002, project emission is not be considered for a wind project
		N <sub>2</sub> O	No	As per ACM0002, project emission is not be considered for a wind project



# **B.4**. Description of how the <u>baseline scenario</u> is identified and description of the identified baseline scenario:

>>

#### The steps considered for determination of the baseline scenario :

The realistic and credible alternatives to the project activity will be as follows:

a) Proposed Project activity not undertaken as a CDM activity

b) To allow the members of TASMA – The industrial consumers - to continue drawing power from the southern grid, that is without investing in the project activity.

Alternative a, is not realistic as implementation of the project activity without CDM revenue is not financially attractive as demonstrated in the additionality discussion in section B.5. So, the credible alternative will be drawing of power from the southern grid (Alternative b).

#### **Baseline scenario:**

Electricity delivered to the grid by the project would have otherwise been generated by the operation of grid-connected power plants and by the addition of new generation sources.

# **B.5.** Description of how the anthropogenic emissions of GHG by sources are reduced below those that would have occurred in the absence of the registered CDM project activity (assessment and demonstration of additionality):

>>

The additionality of the project activity has been demonstrated and assessed using the latest version of the "Tool for the demonstration and assessment of additionality".

#### Step 0:

#### Preliminary screening based on the starting date of the project activity

#### Requirement :

If project participants wish to have the crediting period starting prior to the registration of their project activity, they shall:

(a) Provide evidence that the starting date of the CDM project activity falls between 1 January 2000 and the date of the registration of a first CDM project activity, bearing in mind that only CDM project activities submitted for registration before 31 December 2005 (subsequently modified to March 31 2007) may claim for a crediting period starting before the date of registration

#### Project Characteristics:

The starting date of all sub-projects falls between 1st January 2000 and the date of the registration of the first CDM project activity.





page 12

TASMA has submitted the PDD to the DOE before December 31, 2005 and has presented all documentation necessary for initial submission. These documents included the identification of sub-project owners and commissioning dates. These documents have been verified by the DOE at site.

The identification details are presented in Appendix -3.

Conclusion:

Step 0 - (a) is satisfactorily passed.

#### Requirement

(b) Provide evidence that the incentive from the CDM was seriously considered in the decision to proceed with the project activity. This evidence shall be based on (preferably official, legal and/or other corporate) documentation that was available to third parties at, or prior to, the start of the project activity.

#### Project Characteristics :

TASMA has created awareness of CDM to its members through training programs conducted with the assistance of the manufactures of WTGs, such as Enercon and Suzlon in 2001.

Following this, TASMA has deliberated with its members and structured the approach plan for CDM activities for its members. The extraordinary general meeting of TASMA held on 07/02/2002 approved this approach, plan, guidelines and rules for the CDM activity to be co-ordinated by TASMA.

Based on the information provided by WTG suppliers and the initiative and responsibility taken up by TASMA, the individual sub project owners have considered the CDM revenue in their investment decisions. The individual sub project owners have authorised TASMA to act on their behalf to obtain CDM benefits and to group the eligible projects in one PDD so as to cut transaction costs.

Following documents evidence the process and have been verified the DOE.



page 13

	Торіс	Reference / File Name
1.	Letter from Suzlon on CDM	Seminar-suzlon.jpg
2.	Letter from Enercon on CDM	Seminar-enercon.jpg
3.	Record of CDM Seminar on 3/11/2001	MOM-1.jpg
4.	Signature of participants for the above Seminar	MOM-1- sign-1.jpg MOM-1- sign-2.jpg
5.	Transcript of the above record	MOM-1-Transcript.doc
6.	Minutes of Meeting (Extraordinary General Meeting of the Association) for Formulating the Guidelines and Rules – 07/02/2002 This evidence is official and legal documentation that was available to third parties (by law, the minutes book of an association is available for	MOM-2.jpg
	Societies) the start of the project activity.	
7.	Signature of participants for the above Meeting The rules of the association require that minutes of the meeting be signed by the members present	MOM-2- sign-1.jpg MOM-2- sign-2.jpg
	at the meeting, constituting the quorum.	
8.	General Rules Circular The circular of the Association is a legal document, part of the minutes book and circulated to all members. It is available to public	General Rules Circular.doc
9.	Authorization Samples	Authorization –1.ipg
		Authorization –2.jpg Authorization –3.jpg Authorization –4.jpg
		Authorization –5.jpg Authorization –6.jpg

The documentation as above provides evidence that the incentive from the CDM was seriously considered in the decision to proceed with the project activity. This evidence is based on official and legal communication between TASMA and the sub project owners.

# Conclusion:

Step 0 – b is satisfactorily passed. Proceed to step -1



page 14

# Step 1.

# Identification of alternatives to the project activity consistent with current laws and Regulations

#### Sub-step 1a. Define alternatives to the project activity:

#### Requirement

- 1. Identify realistic and credible alternative(s) available to the project participants or similar project developers that provide outputs or services comparable with the proposed CDM project activity. These alternatives are to include:
  - The proposed project activity not undertaken as a CDM project activity;
  - All other plausible and credible alternatives to the project activity that deliver outputs and on services (e.g. electricity, heat or cement) with comparable quality, properties and application areas;
  - If applicable, continuation of the current situation

#### Project Characteristics

The following are alternative scenarios for this project activity:

- Proposed Project activity not undertaken as a CDM activity;
- The industrial consumers continue drawing power from the grid.

#### Sub-step 1b. Enforcement of applicable laws and regulations

#### Requirement

2. The alternative(s) shall be in compliance with all applicable legal and regulatory requirements, even if these laws and regulations have objectives other than GHG reductions, e.g. to mitigate local air pollution. This sub-step does not consider national and local policies that do not have legally-binding status.

3.If an alternative does not comply with all applicable legislation and regulations, then show that, based on an examination of current practice in the country or region in which the law or regulation applies, those applicable legal or regulatory requirements are systematically not enforced and that non-compliance with those requirements is widespread in the country. If this cannot be shown, then eliminate the alternative from further consideration

4. If the proposed project activity is the only alternative amongst the ones considered by the project participants that is in compliance with all regulations with which there is general compliance, then the proposed CDM project activity is not additional.

#### Project Characteristics



Both the alternative(s) are in compliance with all applicable legal and regulatory requirements (Indian Electricity Act 2003, The National Electricity Policy) including the environmental regulations (Environmental Protection Act 1987).

#### Conclusion

The proposed project activity is not the only alternative amongst the ones considered by the project participants that is in compliance with all regulations.

Step 1 is satisfactorily passed. Proceed to step 2 (Investment analysis) or step 3 (Barrier analysis).

Step 2.

#### Investment analysis

#### Requirement

Sub-step 2a. Determine appropriate analysis method Sub-step 2b. – Option I. Apply simple cost analysis

#### Sub-step 2b. – Option II. Apply investment comparison analysis

1. Identify the financial indicator, such as IRR, NPV, cost benefit ratio, or unit cost of service levelized cost of electricity production in \$/kWh or levelized cost of delivered heat in \$/GJ) most suitable for the project type and decision-making context.

#### Sub-step 2b – Option III. Apply benchmark analysis

2. Identify the financial indicator, such as IRR, NPV, cost benefit ratio, or unit cost of service (e.g.,levelized cost of electricity production in \$/kWh or levelized cost of delivered heat in \$/GJ) most suitable for the project type and decision content

#### Project Characteristics:

Option I is not applicable as the project activity involves economic benefits in the form of revenue form electricity tariffs. It is proposed to use **Option III – Investment comparison analysis** and the financial indicator that is identified is the project IRR as suggested by the additionality tool. The bench mark for return on equity has been established as 16 % for investments in the Indian power sector. This bench mark is referred to in the document dated December 1997 of the Central Electricity Authority (CEA). The same bench mark has also been recommended in the Central Electricity Regulatory Commission (CERC) notification dated March 26th 2001. The same figure is further confirmed by the Tamil Nadu Electricity Regulatory Commission – Order dated 15/05/2006 (http://www.tnerc.tn.nic.in/). Thus 16% post tax return on equity has been an established benchmark for a long time, whether in the public or private sector. Thus, in India all public notifications referring to investment criteria set the return on equity as benchmark.

The only bench mark relating to project IRR is available for investments into wind power by the project financing divisions of Banking Institutions (which is a private communication from Banks to individual



loan seekers). Also, registered Indian CDM projects of similar nature have used project IRR of 16% as bench mark for investments.

#### Conclusion :

Pre Tax return on equity of 16 % can be used as bench mark for the project IRR.

#### Sub-step 2c. Calculation and comparison of financial indicators:

#### Requirement

- 5. Calculate the suitable financial indicator for the proposed CDM project activity and, in the case of Option II above, for the other alternatives. Include all relevant costs (including, for example, the investment cost, the operations and maintenance costs), and revenues (excluding CER revenues, but including subsidies/fiscal incentives. where applicable), and, as appropriate, non-market cost and benefits in the case of public investors.
- 6. Present the investment analysis in a transparent manner and provide all the relevant assumptions in the CDM-PDD, so that a reader can reproduce the analysis and obtain the same results. Clearly present critical techno-economic parameters and assumptions (such as capital costs, fuel prices, lifetimes, and discount rate or cost of capital). Justify and/or cite assumptions in a manner that can be validated by the DOE. In calculating the financial indicators. The project's risks can be included through the cash flow pattern, subject to project-specific expectations and assumptions (e.g. insurance premiums can be used in the calculation to reflect specific risk equivalents).
- 7. Assumptions and input data for the investment analysis shall not differ across the project activity and its alternatives, unless differences can be well substantiated.
- 8. Present in the CDM-PDD submitted for validation a clear comparison of the financial indication for the proposed CDM activity and :
  - a. the alternatives, if Option II (investment comparison analysis) is used. If one of the other alternative has the best indicator (e.g. highest IRR), then the CDM project activity can not be considered as the most financially attractive.
  - b. The financial benchmark, if Option III (benchmark analysis) is used. If the CDM project activity has a less favourable indicator (e.g. lower IRR) than the benchmark, then the CDM project activity cannot be considered as financially attractive.

#### Project Characteristics:

For the investment analysis of this project not only has each and every sub project been individually considered, but also a longer life of 20 years has been used for cash flow projections. The financial indicator, namely the project IRR has been calculated. All relevant costs (including, the investment cost, the operations and maintenance costs), and revenues (excluding CER revenues, but including subsidies/fiscal incentives. where applicable) are included. Non-market cost and benefits are not included because the sub project entities are not public investors.

The following table illustrates the parameters used for the investment analysis. Some of these parameters are common for all sub projects. Some of the parameters are specific to sub projects. The use of these



parameters indicating if they are assumed or based on actual figures is explained in the table.

For each of the individual sub projects the debt funding has been used based on the actual figures.

	Note : $1 \text{ Lakh} = 0.1 \text{ Million}$			
Para	ameters Used In the Investment Analysis – Con	nmon for all Projects		
Parameters	Whether the value is actual or assumed	Reference/Justification		
Wheeling Charges	5 % Actual	Bills		
Banking Charges	Assumption : 10 % of the kWh generated are banked Actual: 5% the banked kWh are charged at the prevailing tariff rate as banking charges.	Based on empirical data of a typical case study. Bills		
Rate per Kwh of generation	Rs 3.68 for Captive, Rs 2.70 for Sale to EB – Actual Values	Tamilnadu Electricity Board Adjustment Statements		
Generation Tax	Rs 0.10 /Kwh - Actual	The Tamilnadu Electricity (Taxation on consumption) act 1962 – Act 4 of 1962		
Depreciation	4.5 % depreciation is assumed.	Only used to calculate the tax. No direct influence on the cash flow analysis. As the life time specified by suppliers is 20 year for WTGs and accounting practice is to have a 10 % residual value, the Straight Line Method is used to arrive at 4.5 % depreciation. This practice is also approved by TNERC.		
Minimum Alternate Tax (MAT)	<ul> <li>7.87 % for the year April 2002-March 2003</li> <li>7.68 % for the year April 2003-March 2004</li> <li>7.84 % for the year April 2004-March 2005</li> <li>8.42 % for the year April 2005-March 2006</li> </ul>	Income Tax Act /Finance Bill of Govt of India for the respective years		
Project length	20 years	For this project activity, a conservative project length of 20 years has been used, which matchess the life time of WTGs, as specified by the suppliers. It is normal for energy projects to use IRR calculations based on 10-12 years of cash flow. Financial institutions lending funds suggest this approach. (Reference letter from Bank has been provided.). All the registered wind projects have used 10 years cash flows		



Parameters Used In the Investment Analysis – Specific For sub Projects				
Parameters	Whether the value is actual or assumed	Reference/Justification		
Cost of the Project per WTG	Rs In Lakhs - Actual	Invoices		
Loan	Rs In Lakhs – Actual	Loan statement		
Loan Repayment	Rs In Lakhs - Actual	Loan statement		
Loan Tenure	Years - Actual	Loan statement		
Moratorium	Years - Actual	Loan statement		
Interest Rate	% of Interest Rate - actual	Loan statement		
Generation	Lakh (Kwh) – Estimated based on site Performance ( Lakh = 100,000 or 0.1 Million)	The specified Plant Load Factor by the supplier is 25 % However a range of 21-27% has been chosen based on the past performance of the WTGs.		
Operation & Maintenance cost	1.1 % of Plant Cost	TNERC order no 3 dated 15/05/2006 (For increase in %)		
Insurance premium payable	0. 75 %	TNERC Guidelines		
Miscellaneous expenses	Not Considered (Included in O&M)			

## Conclusion :

The individual analysis for all the sub projects shows the results on IRR as follows:.

	Project Activity	Benchmark
Max - %	14.60	16.0
Min - %	12.24	16.0
Average - %	13.46	16.0

The investment analysis work sheets for the individual projects are submitted separately in excel files grouped as follows:

- IRR2003: all WTGs installed from April 2002 to March 2003,

- IRR2004: all WTGs installed from April 2003 to March 2004,

- IRR2005: all WTGs installed from April 2004 to March 2005,

- IRR2006: all WTGs installed from April 2005 to March 2006.



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page 19

Sub-step 2d. Sensitivity analysis (only applicable to options II and III):

#### **Requirement**

9. Include a sensitivity analysis that shows whether the conclusion regarding the financial attractiveness is robust to reasonable variations in the critical assumptions. The investment analysis provides a valid argument in favour of additionality only if it consistently supports (for a realistic range of assumptions) the conclusion that the project activity is unlikely to be the most financially attractive (as per step 2c para 8a) or is unlikely to be financially attractive (as per step 2c para 8b).

#### Project Characteristics

Sensitivity analysis has been conducted considering the following critical parameters

- Generation and
- Maintenance Expenses

Generation (which depends on wind speed, wind availability and grid availability) is the factor which will critically influence the investment analysis. All the individual sub projects have been subjected to sensitivity analyses by varying the generation +/- 4 percent and also by varying maintenance expenses by 5 %. The expectation of variation in Plant Load Factor based on Wind Speed Patterns is about 1%, which translates into a variation of less than 4%. Variation in maintenance cost has been done as per the TNERC order.



page 20

	Project Activity					
	Base Value	Generatio	n Maintena		ance	Bench Mark
		With 4 % Increase	With 4 % Decrease	With 5 % Increase	With 5 % Decrease	
Max-%	14.60	15.60	13.60	14.50	14.70	16.0
Min -%	12.24	13.15	11.31	12.13	12.34	16.0
Average- %	13.46	14.42	12.50	13.36	13.56	16.0

#### **Conclusion**

From the above discussion it is clear that– all the individual wind turbines in the bundle have a project IRR that is less than the relevant Benchmark of 16%, even considering higher generation rates or lower operating and maintenance costs.

The sub projects in this project activity, without CDM revenue, are not financially attractive.

Steps 2a, 2b, 2c are passed satisfactorily. Proceed to step 4

# Step 4. Common practice analysis

#### Requirement

#### Sub-step 4a. Analyze other activities similar to the proposed project activity:

1. Provide an analysis of any other activities implemented previously or currently underway that are similar to the proposed project activity. Projects are considered similar if they are in the same country/region and/or rely on a broadly similar technology, are of a similar scale, and take place in a comparable environment with respect to regulatory framework, investment climate, access to technology, access to financing, etc. Other CDM project activities are not to be included in this analysis. Provide quantitative information where relevant.

#### Sub-step 4b. Discuss any similar options that are occurring:

2. If similar activities are widely observed and commonly carried out, it calls into question the claim that the proposed project activity is financially unattractive (as contended in Step 2) or faces barriers (as





page 21

contended in Step 3). Therefore, if similar activities are identified above, then it is necessary to demonstrate why the existence of these activities does not contradict the claim that the proposed project activity is financially unattractive or subject to barriers. This can be done by comparing the proposed project activity to the other similar activities, and pointing out and explaining essential distinctions between them that explain why the similar activities enjoyed certain benefits that rendered it financially attractive (e.g., subsidies or other financial flows) or did not face the barriers to which the proposed project activity is subject.

3 Essential distinctions may include a serious change in circumstances under which the proposed CDM project activity will be implemented when compared to circumstances under which similar projects where carried out. For example, new barriers may have arisen, or promotional policies may have ended, leading to a situation in which the proposed CDM project activity would not be implemented without the incentive provided by the CDM. The change must be fundamental and verifiable.

Project Characteristics

#### a. <u>Analyse other activities similar to the project activity and</u>

## b. <u>Discuss Similar Options that are Occurring</u>

The project activity is "promotion and implementation of wind power generation by an Industry Association through its members" and to our knowledge and available records such similar activity has not occurred anywhere else in the state of Tamilnadu (evidence for the same is provided to DOE) or the states covered by the Southern grid.

It is to be noted here that TASMA's role has been:

- To promote the wind power generation
- To scan the technologies and provide assistance in procuring the technology
- Assist in project and post project monitoring and trouble shooting (non technical)
- Assist in CDM process and procuring CDM benefits

The individual sub project owner manages the investments required and takes the risks. This model made it possible for small and medium enterprises to adopt clean energy generation by taking best benefits of policies, negotiations and CDM. This model is unique and is not undertaken anywhere else in the state of Tamilnadu or other states covered by the Southern grid (the relevant grid in the baseline scenario)

Activities such as "Implementation, operation and maintenance, monitoring, revenue collection" are undertaken by the Wind farm managers who are WTG manufacturers/suppliers. But the business and operational model herein is significantly and critically different from that of this project activity.

However, if we consider similar activity as the installation and operation of WTGs, then a number of such activities have occurred: In India only 10 States have wind power generation, in which Tamilnadu has a maximum share.

The following table shows the installation of WTG project in Tamilnadu, from the year 1992, till March 2005:



page 22

State	Tamil Nadu	
Gross Potential	3050	
Year	Capacity - MW	Cumulative Capacity - MW
Upto March 1992	22.31	22.31
1992-3	11.07	33.38
1993-4	50.47	83.85
1994-5	190.87	274.72
1995-6	281.68	556.4
1996-7	119.765	676.165
1997-8	31.14	707.305
1998-9	17.765	725.07
1999-2000	45.675	770.745
2000-1	41.865	812.61
2001-2	45	857.61
2002-3	132.8	990.41
2003-4	371.2	1361.61
2004-5	315.9	1677.4

Source: (http://mnes.nic.in/annualreport/2004 2005 English/). Hard copy has been submitted to the DOE.

Out of the projects mentioned above, the projects up to the year 2001 belonged to a different and more favourable policy regime.

The following policies have changed during late 2001 and early 2002 with a critical adverse impact on the attractiveness of investment into wind power generation:

- The Tariff has changed from Rs.2.25/KWh with 5% escalation each year to fixed Rs.2.70/KWh by an order dated 27.09.2001 by the Tamilnadu Electricity Board.
- The wheeling and Banking charges have increased from 2% to 5% by an order dated 27.09.2001 by the Tamilnadu Electricity Board.
- The Electricity Generation per MW capacity has started decreasing due to overcrowding of WTGs.

Bedsides the policies cited above (which were favourable to projects before 2002, the other unfavourable circumstances with respect to project activities after 2002 are as follows:

• The cost of WTG and the land price have steadily increased.





	2000	2001	2002	2003	2004	2005
WTG cost / MW (Rs Cr)	3.33	3.46	3.53	3.8	4.2	4.5
Land Cost/ acre Rs / Acre	10000	10000	10000	15000	25000	30000

(Ref : Based the inputs from Mr Vetrivelan - Project manger - wind mills of Sri Shanmugavel Group of Mills )

Accordingly, WTG investment decisions up to 2001-2002 cannot be considered as similar project activities. All sub projects have been planned – decisions on investments were taken - during February 2002 to September 2004.

The projects after the year 2001-2002, i.e. during 2002-03; 2003-04; 2004- 2005, are of relevance for analysis as these are the similar activities that were being implemented and planned at the time of investments into the sub projects in this project activity. During this period (April 2002 – March 2005), the wind mill capacity added in Tamil Nadu is 819.9 MW including the ones in this project activity. We list such similar activities below and provide evidence for the stage of CDM projects that such projects are in.:

sl.no	Project Title	Capacity	Date of Commissi oning / Project Activity	Belongs to the Period - 2002- 2003 2004- 2005	Status	Source
1	Wind electricity generation in Tamil Nadu	<u>15</u>	1-Apr-03	Y	Validation	UNFCCC
2	37.60 MW Bundled Wind Power Project in Nagercoil	<u>37.6</u>	1-Sep-01	N	Validation	UNFCCC
3	<u>11.2 Wind Power project in</u> <u>Tamilnadu, by Amarjothi Group</u>	<u>11.2</u>	1-Mar-03	Y	Validation	UNFCCC
4	6.75 MW Small Scale Grid Connected "Wind Electricity Generation Project" by Tamil Nadu Newsprint and Papers Limited.	<u>6.75</u>	29-Mar-01	N	Validation	UNFCCC
5	12.3 MW wind energy project in Tamilnadu, India	<u>12.3</u>	15-Apr-04	Y	Registered	UNFCCC
6	<u>12 MW Bundled Wind Power</u> Project in Tenkasi	<u>12.3</u>	30-Apr-04	Y	Validation	UNFCCC
7	25.70 MW Bundled Wind Power Project in Udumalpet	<u>25.7</u>	1-Mar-04	Y	Validation	UNFCCC





8	56.25 MW wind energy project	<u>56.25</u>	1-Mar-02	Y	Registered	UNFCCC
	in Tirunelveli and Coimbatore				_	
	districts in Tamilnadu, India.					
9	15 MW Grid Connected Wind	15	28-Sep-02	Y	Validation	UNFCCC
	Energy Project at Sankaneri		-			
	Village in Tamil Nadu (India)					
10	Wind Electricity Generation at	3.6	30-Sep-04	Y	Registered	UNFCCC
	Erakandurai, Dist :Tirunavalli by				C	
	M/s GHCL Ltd					
11	19.27 MW Grid connected wind	19.27	29-Mar-01	N	Validation	UNFCCC
	electricity generation project by					
	KPR Mills in Tamil Nadu.					
12	16.25 MW grid connected	16.25	28-Mar-04	Y	Validation	UNFCCC
	electricity generation project at					
	Coimbatore in Tamil Nadu.					
13	38.75 MW grid connected	<u>38.75</u>	13-Oct-03	Y	Validation	UNFCCC
	electricity generation project at					
	<u>Tirunelveli in Tamil Nadu.</u>					
14	41.6 MW grid connected	<u>41.6</u>	12-Mar-03	Y	Validation	UNFCCC
	electricity generation project by					
	Madras Cements Limited in					
	Tamil Nadu.					
15	40.68 MW grid connected	<u>40.68</u>	30-Mar-03	Y	Validation	UNFCCC
	electricity generation project by					
	Indian Wind Power Association					
	<u>at Tirunelveli, in Tamil Nadu.</u>					
16	21.00 MW grid connected	<u>21</u>	14-Dec-00	Ν	Validation	UNFCCC
	electricity generation project by					
	Indian Wind Power Association					
17	at Tirunelveli in Tamil Nadu.	10.005	1.14 00		** 1* 1 .*	IDECCC
17	10.005 MW captive grid	10.005	1-Mar-00	N	Validation	UNFCCC
	connected wind power project by					
	the members of IWPA at					
10	<u>Combatore</u>	0.41	1 Mar 00	N	Validation	LINECCC
18	9.410 MW GHd-connected wind	<u>9.41</u>	1-Mar-00	IN	vandation	UNFLUC
	WPA at Coimbatore district					
	Tamil Nadu India					
10	Dundlad 2.0 MW Wind Energy	2	1 Mar 06	N	Validation	LINECCC
19	Buildied 5.0 WW willd Ellergy	2	1-Mar-00	IN	vandation	UNFLUC
20	7 25 MW Wind Energy Project	7.25	27 Oct 05	N	Validation	LINECCC
20	of Aruppukottai Sri Javavilas	1.25	27-001-03	TN	v anuation	UNICEC
	I td Tamilnadu India					
					Validation	UNECCC
21	- 7 85 MW Bundled Wind Power	25	24-Ian 05	v	Validation	UNECCC
<i>L</i> 1	Project in Southern India	<u>2.3</u>	24-Jall-03	1	v anuation	UNICCC
	<u>1 Toject ili Southerii Illula</u>					



22	Bundled 15 MW Wind Power Project in India	<u>1.25</u>	29-Mar-05	Y	Validation	UNFCCC
		406.665		292.38	Validation	UNFCCC

Source for UNFCCC : - <u>http://cdm.unfccc.int/projects/db</u>

It could be seen from the above table, a total of 406.665 MW is accounted for by all the projects under validation /registration and 292.38 MW accounted for by the projects between 2002-2003 and 2004-2005.

For the same period, the capacity accounted for by TASMA Project is as given below.

1	Bundled Wind power project in	<u>467.79</u>	UNFCCC
	Tamilnadu, India co-ordinated by		
	Tamil Nadu Spinning Mills		
	Association (TASMA)		
2	TASMA - Project II, which will	31.91	TASMA
	be submitted for validation once		
	the first TASMA project is		
	registered.		

Summary Analysis

YEAR	TOTAL MW
Installed capacity in Tamilnadu in the period 2002-2003 and 2004-2005	819.9
Capacity of - Projects Seeking CDM Revenue (Excluding TASMA)	292.38
Capacity TASMA Project I MW	467.79
Capacity TASMA Project II MW	31.91
Total Projects Seeking CDM – MW	792.29
% Projects Seeking CDM Revenue	96.63%

From the above analysis it can be seen that similar activities are not widely observed and commonly carried out, without CDM consideration.



UNFCCC

CDM – Executive Board

page 26

#### **Conclusion**

It is clear from the above discussion that the other WTG projects that have not considered CDM benefits but have occurred before 2001-2002, had better policy and investment climate. And most of the wind power projects that are established after 2001-2002, are being structured as CDM projects and are at various stages in the CDM project cycle. Also it may be noted that three of the above projects are already registered with UNFCCC.

It has thus been convincingly demonstrated and evidenced that similar activities are not widely observed and commonly carried out in the region without the benefit of the CDM.

Sub-steps 4a and 4b are satisfied. Can proceed to step 5.

Step 5.

Impact of CDM registration

#### Requirement

Explain how the approval and registration of the project activity as a CDM activity, and the attendant benefits and incentives derived from the project activity, will alleviate the economic and financial hurdles (Step 2) or other identified barriers (Step 3) and thus enable the project activity to be undertaken.

#### Project Characteristics

At the time of project planning the CER prices forecast were widely varying in the range of USD4 - USD 100. The prototype carbon fund of the world bank has been offering USD 6 for wind projects in India. Based on the discussions with various experts TASMA arrived at a rate of 6 Euros for estimating the CDM benefit. Accordingly the same number is used to demonstrate the impact of the CDM revenue.

The following table shows, how the CDM revenue helps in improving the IRR of the sub projects. Although the bench mark is not crossed for some projects even after the CDM revenue, the additional revenue improves the IRR significantly and sufficiently so as to let to a favourable decision for investment. The following table shows the summary of the impact of CDM revenue on the IRR.

	Before CDM	After CDM
Max-%	14.60	16.29
Min -%	12.24	13.71
Average-%	13.46	15.15



# B.6. Emission reductions:

**B.6.1.** Explanation of methodological choices:

>>

#### Approach

Existing actual or historical emissions, as applicable – is used for this project activity.

#### **Base Line Scenario**

Electricity delivered to the grid by the project would have otherwise been generated by the operation of grid-connected power plants and by the addition of new generation sources, as reflected in the combined margin (CM) calculations described below.

The baseline emission factor (EFy) is calculated as a combined margin (CM), consisting of the combination of operating margin (OM) and build margin (BM) factors according to the following three steps. Calculations for this combined margin are based on data from an official source and are made and made publicly available.

The base line emission factor consists of two components i.e. the operating and the build margin. The operating and build margins have been calculated by the Central electricity authority and published as version 1.1 on the CEA site at

www.cea.nic.in/planning/c%20and%20e/Government%20of%20India%20website.htm.

The value of the combined margin has been calculated as:  $0.932 \text{ tCO}_2/\text{MWh}$ See annex 3 for the exact calculations.

#### **B.6.2.** Data and parameters that are available at validation:

(Copy this table for each data and parameter)

Data / Parameter:	EFY
Data unit:	TCO <sub>2</sub> e / MWh
Description:	CO <sub>2</sub> emission factor for southern grid of India
Source of data used:	Based on ACM0002, EFy is calculated as the weighted average of OM
	Emission factor and BM emission factor.
Value applied:	0.932
Justification of the	The calculation of <b>EF</b> <sub>Y</sub> is based on $EF_{OM,y}$ and $EF_{BM,y}$ , as per ACM0002, which
choice of data or	is an approved methodology.
description of	
measurement methods	
and procedures actually	
applied :	
Any comment:	Detailed information is presented in annex 3.

Data / Parameter:	EF <sub>OM,y</sub>
Data unit:	TCO <sub>2</sub> e / MWh





page 28

Description:	Operating Margin Emission Factor for southern grid of India
Source of data used:	Based on ACM0002, simple OM emission factor is calculated.
Value applied:	1.003
Justification of the	The calculation EF <sub>OM,y</sub> , as per on ACM0002, which is an approved
choice of data or	methodology.
description of	
measurement methods	
and procedures actually	
applied :	
Any comment:	Detailed information is presented in annex 3.

Data / Parameter:	$\mathrm{EF}_{\mathrm{BM},\mathrm{y}}$
Data unit:	TCO <sub>2</sub> e / MWh
Description:	Build Margin Emission Factor for southern grid of India
Source of data used:	Based on ACM0002, BM emission factor is calculated.
Value applied:	0.718
Justification of the	The calculation EF <sub>BM,y</sub> , as per on ACM0002, which is an approved methodology
choice of data or	
description of	
measurement methods	
and procedures actually	
applied :	
Any comment:	Detailed information is presented in annex 3.

Data / Parameter:	F <sub>i, y</sub>
Data unit:	Kgs
Description:	Quantity of Fuel used in kgs by different power plants
Source of data used:	Central electricity authority: $CO_2$ baseline database, 1.1 at
	www.cea.nic.in/planning/c%20and%20e/Government%20of%20India%20websi
	<u>te.htm</u>
Value applied:	As in the excel file
Justification of the	The CEA is a legal / regulatory authority of India, whose data is available
choice of data or	publicly.
description of	
measurement methods	
and procedures	
actually applied :	
Any comment:	This is derived from the net heat rate for each of the plant

Data / Parameter:	NCVi
Data unit:	Kcals/ Kg
Description:	Net Calorific Value for different Fuels
Source of data used:	Central electricity authority: $CO_2$ baseline database, 1.1 at
	www.cea.nic.in/planning/c%20and%20e/Government%20of%20India%20websi
	<u>te.htm</u>





page 29

Value applied:	As in the excel file.
Justification of the	The CEA is a legal / regulatory authority of India, whose data is available
choice of data or	publicly.
description of	
measurement methods	
and procedures	
actually applied :	
Any comment:	

Data / Parameter:	OXID <sub>i</sub>
Data unit:	%
Description:	Oxidation factor for Fuel i
Source of data used:	2006 IPCC Guidelines for National Greenhouse Gas Inventories
Value applied:	As in the excel file.
Justification of the	IPCC values have to be applied where no national values are available as of the
choice of data or	CDM EB decision.
description of	
measurement methods	
and procedures actually	
applied :	
Any comment:	

Data / Parameter:	EF <sub>C02,i</sub>
Data unit:	KG of CO <sub>2</sub> per KG of fuel
Description:	Emission factor coefficient
Source of data used:	2006 IPCC Guidelines for National Greenhouse Gas Inventories
Value applied:	As in the excel file
Justification of the	IPCC values have to be applied where no national values are available as of the
choice of data or	CDM EB decision.
description of	
measurement methods	
and procedures actually	
applied :	
Any comment:	

Data / Parameter:	Gen <sub>j,y</sub>
Data unit:	GWh
Description:	Electricity supplied by each plant to the southern grid
Source of data used:	Central electricity authority: CO <sub>2</sub> baseline database, 1.1 at
	www.cea.nic.in/planning/c%20and%20e/Government%20of%20India%20websi
	<u>te.htm</u>
Value applied:	As in the excel file
Justification of the	The CEA is a legal / regulatory authority of India, whose data is available
choice of data or	publicly.
description of	
measurement methods	
and procedures	



page 30

UNFCC

actually applied :	
Any comment:	

#### **B.6.3** Ex-ante calculation of emission reductions:

>>

For a given year, the emission reductions contributed by the project activity (ER y) is calculated as follows:

ER y = BEy - PEy - Ly

Where

ERy = Emission reductions for the year PEy = Project Emissions for the year Ly = Leakage for the year

The emission reductions will be calculated based of actual net electricity supplied to the grid, using the baseline emission factor presented above.

<b>B.6.4</b> Summary of the ex-ante estimation of emission reductions:				
>>				
Year	Estimation of	Estimation of	Estimation of	Estimation of
	Project Activity	Baseline	Leakage	Emissions
	Emissions	Emissions	Emissions	Reduction
	(tonnes of CO <sub>2</sub> eq.)	(tonnes of CO <sub>2</sub>	(tonnes of CO <sub>2</sub> eq.)	(tonnes of $CO_2$ eq.)
		eq.)		
2003	0	130 480	0	130 480
2004	0	398 896	0	398 896
2005	0	726 960	0	726 960
2006	0	801 520	0	801 520
2007	0	801 520	0	801 520
2008	0	801 520	0	801 520
2009	0	801 520	0	801 520
2010	0	801 520	0	801 520
2011	0	801 520	0	801 520
2012	0	801 520	0	801 520
(tonnes of	0	6 866 976	0	6 866 976
$CO_2 eq.)$				

Note : The generation is less in 2003, 2004 and 2005 as the date of commissioning is different for different WTGs and all the wind mills became fully operational in 2006 only.



page 31

# **B.7** Application of the monitoring methodology and description of the monitoring plan:

# **B.7.1** Data and parameters monitored

(Copy this table for each data and parameter)					
Data / Parameter:	EGv				
Data unit:	GWh/y				
Description:	Net electricity supplied to the Southern grid of India by the project				
Source of data to be	Actual measurement records (From energy meter reading at sub station)				
Value of data applied		Generation			
for the purpose of	Year	in GWh			
calculating expected	2003	140			
emission reductions in	2004	428			
section B.5	2005	780			
	2005	860			
	2000	860			
	2007	800			
	2008	860			
	2009	860			
	2010	860			
	2011	860			
	2012	860			
Description of	Measured by 0	.5S Class Meter	- (accuracy ±0.5%)		
measurement methods	Net generation = (Export-Import)				
and procedures to be	To be certified	by TNEB Staten	nent		
applied:	Monthly Measurement by TNEB				
	Daily Measurement by Site Engineer				
QA/QC procedures to	QA/QC of Monitoring Equipment				
be applied:	Calibration procedure: Electricity meter is calibrated by the TNEB at least				
	once in 5 years with a calibration report kept by the project owner. This will be as per the guidelines followed by TNEB.				
Any comment:	Detailed Monit	toring plan is disc	cussed in B7.2 and Annexure-4		



>>



page 32

#### **B.7.2** Description of the monitoring plan:

The Management Structure for monitoring emission reductions would provide for :

- Operation and Maintenance
- Maintenance of Meters and Calibration
- Calculation of Emission Figures
- Local Environmental Care
- Changes in project boundary
- Documents and Records
- Periodic Review meetings

The project activity will be operated and managed by project sponsors who are also the project proponents. They will ensure the safe operation and a project manager will be allocated with the responsibility for safe operation of the wind farms and the safety of the employees working in the farms. The CDM wind power project will abide by all regulatory and statutory requirements as prescribed under the state and central laws and regulations. To ensure such performance, the project sponsors will monitor all its activities and performance related to emission reduction. Apart from the main meter which will be used and owned by TNEB, LCS meters that meet the Indian and regional electricity authority's standards (with set calibration schedules), are provided in the wind mills.. The main meters will be calibrated TNEB according to the standard practice of TNEB. All the monitoring data will be recorded and kept under safe custody of the power plant site manager and/or the Management Representative. Also any change within the project boundary, will be recorded and informed to TNEB (as per PPA), and also to TASMA.

Measurement Frequency:

Frequency of measurement by TNEB – Once in a month Frequency of measurement by Site In charge – Once in a day Calibration of the Energy Meter - This is carried out by TNEB (Minimum once in 5 years as per Guidelines followed by TNEB)

No leakage is applicable for this project activity.

Systems based on ISO 9001:2000 will be implemented. The detailed structure of monitoring is given in Annexure -4.

# **B.8** Date of completion of the application of the baseline study and monitoring methodology and the name of the responsible person(s)/entity(ies)

>>

M.Raja Chidambaram of URs Productively has assisted the project sponsor in determining the application of base line study and monitoring methodology whose contact details are as below:

M. Raja Chidambaram Director URs Productively <u>ursraja@vsnl.com</u>





Date of completion of Baseline study: 31/12/2006 The above entity is not a project participant

# SECTION C. Duration of the project activity / crediting period

# C.1 Duration of the <u>project activity</u>:

C.1.1. <u>Starting date of the project activity</u>:

>> 15/02/2002

# C.1.2. Expected operational lifetime of the project activity:

>>

Expected lifetime of the project activity is 20 years

C.2 Choice of the <u>crediting period</u> and related information:

C.2.1. <u>Renewable crediting period</u>

C.2.1.1. Starting date of the first <u>crediting period</u>:

>> Not Applicable

C.2.1.2. Leng	gth of the first crediting period:
C.2.1.2. Leng	of the first crediting period:

>> Not Applicable

C.2.2. Fixed crediting period:

C.2.2.1. Starting date:

>>01/01/2003 for all the sub projects considered under this project activity

C.2.2.2. Length:

>>10 Years



# **SECTION D.** Environmental impacts

>>

# **D.1.** Documentation on the analysis of the environmental impacts, including transboundary impacts:

>>

As per the host country's existing Laws, Environmental Impact Assessments do not apply to wind mill installations. (As per Schedule 1 of Ministry of Environment and Forests (Government of India) notification dated January 27, 1994). However a proactive review of environmental impacts was carried out.

The steps involved are as follows:

- Identify Environmental aspects
- Identify the significant aspects by studying the impact (Refer Criteria Matrix)
- Based on the significance of the aspects prepare Environmental Management Programs or Operational Controls.

The Criteria for analyzing the aspects with respect to the impact, is shown in the following table:

	QUANTIT	OCCURRENCE	RISK	STATUS OF
SCOPE	Y	0	I	CONTROL
SCORE	Q			С
5	Excessive	Continuous	Fatal to Human Life	No Control
4	Very High	Several Times a	Human Health Effect	Partial Control at
		day		output stage
3	High	Once a day	-Land/Water	Partial Control at
	_		contamination	input stage
			-Resources consumption	
2	Moderate	Once a week	Cause discomfort or	Total Control at
			acidic rain or nuisance	output stage
1	Low	Once a month or	Negligible visual impact	Total Control at input
		less frequent		stage
0 11 0		* C		

Environmental aspect and impact analysis:

Activity	Aspect	Score
Equipment moving	Dust	16
	Smoke	16
Generation	Noise	2
	Air quality	1
	Heat	1
	Bird hit	5
Maintenance	Fall/accident	5
	Snake bite	4
	Tower Fall	4



page 35

	Power consumption/	1
	Generation loss	1
	Oil Spillage	б
	Waste cloth	4
	Broken switches	
	Metal pieces	1
General	Ecology	3
	Interference with communication	4
	channels	
	Soil erosion	1

As mentioned above there are no aspects scoring above 25. Hence there are no significant Environmental aspects. But, considering the long-term contribution to environment some Environmental Management Programs and Operation Controls have been established.

**D.2.** If environmental impacts are considered significant by the project participants or the <u>host</u> <u>Party</u>, please provide conclusions and all references to support documentation of an environmental impact assessment undertaken in accordance with the procedures as required by the <u>host Party</u>:

As per the host country's existing Laws, Environmental Impact Assessment do not apply to wind mill installations. Moreover the environmental aspect/impact study showed that there are no significant aspects. However some environment management programs and operational controls have been worked out as a proactive measure.

ENVIRONMENTAL MANAGEMENT PROGRAMMES (EMPS)						
EMPs	Action Plan	Time frame	Responsibilities	sponsibilities		
			Implementation	Supervision		
Maintain Noise Levels	Noise monitoring at sensitive receptors	During Operations	Site Engineers	TASMA		
	Periodic maintenance	During Operations	Site Engineers	TASMA		
	Proving Ear muffs to operators	During Operations	Site Engineers	TASMA		
Maintain Ecology	Identification, segregation and safe disposal of wastes	During Operations	Site Engineers	TASMA		
	Plantation of Jetropa	Through out operations	Site Engineers	TASMA		
	Control Spillages					
	Provide Proper approach Roads					
	Minimise soil Erosion					
	Green Belt Development					
Provide safe And healthy Work	Minimum safety setbacks of 150 m or 3 times of turbine height which ever is greater	During Operations	Site Engineers	TASMA		



# UNFCCC

## **CDM – Executive Board**

page 36

environment	should be established from any property line, public roadway/rail			
	Providing rotational speed controls to ensure safe rotation of rotors	During Operations	Site Engineers	TASMA
	Preparing emergency plan for major accidents	During Operations	Site Engineers	TASMA
	Arranging public response program encase of any emergency	During Operations	Site Engineers	TASMA
	Personnel to be trained on hazards, safety procedure, emergency plan and other specific instructions	During Operations	Site Engineers	TASMA
	safety manual instruction will be followed	During Operations	Site Engineers	TASMA
	All necessary PPEs as applicable will be provided	During Operations	Site Engineers	TASMA

OPERATIONAL CONTROL/MONITORING PLAN								
Compo	Project	Parameters	Standard	Location	Freq	Duratio	Responsibility	
nent	stage					n	Impleme	Supervis
							ntation	ion
Noise	Operati	Noise	CPCB	At every	yearly	2	External	TASMA
Level	on	Level	Noise	location		operatio	agency in	
		In Decibels	standards			nal days	coordinat	
						continuo	ion with	
						usly	Site ER	


page 37

#### SECTION E. Stakeholders' comments

>>

#### E.1. Brief description how comments by local <u>stakeholders</u> have been invited and compiled:

>> The local stakeholders are the people living in the villages near by the sites. The opinion of these villagers about the windmill operation has been collected through a questionnaire survey.

The questionnaire covered the following aspects

Survey on Wind Mill in Your area

In your area windmills have been functioning from the year 2001. You are aware that the electricity produced with windmills reduces the load on thermal power plants. This survey is conducted by the Tamilnadu spinning Mills association, on behalf of the member companies whose wind mills are functioning in your locality.

Kindly fill in following questionnaire

Name :

Occupation:

**Educational Qualification** 

Sl	Question	Response
No		-
1.	What do you think about the environment in your locality	
2.	Is your environment affected by wind mill	
3.	Is your TV Reception affected by Windmill	
4.	Does the project affect the livelihood	
5.	Does the project improve livelihood	
6.	Has employment increased due to the project	
7.	Is there Noise problem due to wind mill	
8.	Is there water problem due to windmill	
9.	Is there Vibration problem due to windmill	
10.	Is there any problem with respect to construction	
11.	Does the wind mill affect the migration of birds	
12.	Does the wind mill affect the grazing of cattle	
13.	What are the benefits from the wind Mill	
14.	Comments and suggestions	

The questionnaire was given to the individuals in local language (Tamil)





## **E.2.** Summary of the comments received:

>>

The analysis of the questionnaire shows that the respondents are positively disposed.

The summary analysis as follows: No of Respondents: 215

Sl	Question	Maximum	Actual
No		Possible	score
		+ score	
1.	What do you think about the environment in	100	
	your locality		81.86
2.	Is your environment affected by wind mill	100	86.82
3.	Is your TV Reception affected by Windmill	100	
			94.11
4.	Does the project affect the livelihood	100	94.26
5.	Does the project improve livelihood	100	75.35
6.	Has employment increased due to the project	100	86.51
7.	Is there Noise problem due to wind mill	100	81.71
8.	Is there water problem due to windmill	100	88.06
9.	Is there Vibration problem due to windmill	100	91.32
10.	Is there any problem with respect to construction	100	91.78
11.	Does the wind mill affect the migration of birds	100	75.97
12.	Does the wind mill affect the grazing of cattle	100	77.83
13.	What are the benefits from the wind Mill	100	80.93
14.	Comments and suggestions		



E.3. Report on how due account was taken of any comments received:



page 39

>>

No	Comment	Corrective	Implementation
		Action	action Plan
1	Plant trees to improve environment	Jetropa will be	Project report from
		planted in all	the Tamil Nadu
		possible locations	Agricultural
			University is under
			preparation
2	Water reaching catchments areas	While construction	Identify such roads
	are affected by roads	of roads provide	Prepare plan for
		water drainage	existing roads and
			new roads
<u>3</u>	May be situated 1 KM away from	Consider this factor	Discuss with
	school	in micro-siting	Manufacturers
4	Avoid accidents	Install a proper	Arrange
		maintenance and	programmes
		safety programme	including public
5	Give land back to farmers once the	This is not allowed	Giving back land to
	wind farms are in operation	under the current	farmers will be
		regulation for	considered in case
		safety reasons.	the regulation
			changes.



page 40

UNFCCC

# Annex 1

# CONTACT INFORMATION ON PARTICIPANTS IN THE PROJECT ACTIVITY

Organization:	Tamilnadu Spinning Mills Association – TASMA
Street/P.O.Box:	11 th Cross Street
Building:	Spencer Compound
City:	Dindigul
State/Region:	Tamilnadu
Postfix/ZIP:	624 003
Country:	India
Telephone:	0091 451 2433637 / 0091 451 2428756
FAX:	0091 451 2431513
E-Mail:	dispa@rediffmail.com
URL:	
Represented by:	K.Venkatachalam
Title:	Chief Advisor
Salutation:	Mr.
Last Name:	
Middle Name:	
First Name:	
Department:	All
Mobile:	00 9842133318 / 00 94433 69858 / 00 98652 03226
Direct FAX:	0091 451 2431513
Direct tel:	00 9842133318 / 00 94433 69858 / 00 98652 03226
Personal E-Mail:	





Organization:	Carbon Asset services Sweden AB
Street/P.O.Box:	C/O Tricorona, Drottninggatan 92-94
Building:	
City:	STOCKHOLM
State/Region:	
Postfix/ZIP:	111 36
Country:	SWEDEN
Telephone:	+46 (0) 8 506 885 00
FAX:	+ 46 (0) 8 34 60 80
E-Mail:	<u>Co2@tricorona.se</u>
URL:	www.tricorona.se
Represented by:	
Title:	President and CEO
Salutation:	Mr.
Last Name:	Zweigbergk
Middle Name:	Von
First Name:	Niels
Department:	
Mobile:	+46 (0) 7 085 935 00
Direct FAX:	+ 46 (0) 34 60 80
Direct tel:	+ 46 (0) 8 506 885 51
Personal E-Mail:	nvz@tricirina.se





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page 42

# Annex 2

# INFORMATION REGARDING PUBLIC FUNDING

No public funding has been made use of, for this project activity



page 43

### **ANNEX 3BASELINE INFORMATION**

The combined margin has been calculated as follows: Operating margin 2002-2003: 0.997020187491298 tCO<sub>2</sub>/MWh Operating margin 2003-2004: 1.00937117942201 tCO<sub>2</sub>/MWh Operating margin 2004-2005: 1.00376139622698 tCO<sub>2</sub>/MWh

Average operating margin during the last 3 years: 1.0033842543801 tCO<sub>2</sub>/MWh

Build margin: 0.717986114381437 tCO<sub>2</sub>/MWh

Combined margin:  $0.75 * 1.0033842543801 + 0.25 * 0.717986114381437 = 0.932034719 tCO_2/MWh.$ Rounded to three digits after the comma:  $0.932 tCO_2/MWh$ 

Source: The operating and build margins have been calculated by the Central electricity authority and published as version 1.1 on the CEA site at <a href="https://www.cea.nic.in/planning/c%20and%20e/Government%20of%20India%20website.htm">www.cea.nic.in/planning/c%20and%20e/Government%20of%20India%20website.htm</a>.



#### Annex 4

### MONITORING INFORMATION

The monitoring plan proposed for the project activity will be centrally executed by TASMA. The monitoring plan will cover these following aspects.

- 1. Management Structure:
- 2. Operation and Maintenance
- 3. Maintenance of Meters and Calibration
- 4. Calculation of Emission Figures
- 5. Local Environmental Care
- 6. Changes in project boundary
- 7. Documents and Records
- 8. Periodic Review meetings

## **<u>1. Management Structure</u>**

The monitoring activity will be centrally executed by TASMA. The organization for monitoring will be as follows:



## **1.1 SYSTEMS AND PROCEDURES**





page 45

Detailed systems and procedures will be documented and maintained to implement the monitoring Plan. Following are general guidelines for metering and monitoring. For all these activities detailed procedures will be maintained. After some time these systems will be upgraded to ISO 9001 based quality management system.

## 2. OPERATIONS AND MAINTENANCE

### **Identification of WTGs**

Each WTG which is part of the project activity will be uniquely identified. The ID number will have following structure:

Company ID+ WTG ID

This will be painted in each machine and maintained in all records.

The site engineer will be responsible for operation and maintenance.

The Operation and maintenance activities will include:

- Ensuring Preventive Maintenance
- Ensuring Break Down Maintenance
- Machine operation including resetting
- Recording Generation
- Transmitting Data to TASMA

Data capturing for the above will be done using controlled format.

### **3. MAINTENANCE OF METERS AND CALIBRATION**

### Metering:

The energy meter that measures the export of electricity is installed and maintained by TNEB as per the guidelines followed by TNEB, since TNEB is the regional government authority to measure, approve the generation, and make payments based on the same.

### Metering Equipment:

Metering equipment shall be electronic multipurpose meter. The accuracy of the meters shall be per the guidelines followed by TNEB. Both the main meter and check meter shall follow these guidelines. Currently the accuracy level that is being practiced is 0.5S class. The main meter shall be installed and owned by TNEB and check meters (LCS) shall be installed and maintained by the owner of the project.

### **Daily Meter Reading**





Daily energy meter reading for all WTGs will be taken by the maintenance staff, and will be recorded in the generation log, in a controlled format The Daily Generation information will be sent to TASMA on a monthly basis.

#### Joint Meter Reading :

The monthly meter reading (both main and check meter) is being taken jointly by the Parties (TNEB and Owner) on the fixed day of the following month, as per the procedure of TNEB. At the conclusion of each meter reading, an appointed representative of the TNEB a will sign a document recording the main meter reading and this will be verified by the Owner. The main meter reading will be used for recording electricity generation. Emission reduction calculation is based on kWh generation accepted by TNEB as per the readings of the main meter.

#### **Inspection of Energy Meters:**

The entire main and check energy meters (export and import) shall be installed with as accuracy as prescribed by TNEB guidelines. The current accuracy level is 0.5S Class. Each meter shall be jointly inspected and sealed on behalf of the parties and shall not be interfered with by either party except in the presence of the other party or its accredited representatives.

#### **Calibration and Maintenance of Main Meter:**

The generation recorded by the main meter alone will hold good for the purpose of billing as long as the error in the main meters is within the permissible limits. The calibration of the main meter will be responsibility of TNEB. The calibration of the main meter will be done as per the guidelines / Procedure followed by TNEB. This will be carried out minimum once in 5 years.

If on any occasion it is found that the main meter is beyond permissible limits of error, TNEB will be informed about it, and TNEB will make necessary efforts to correct the meter and recalibrate the same. During the time when the main meter is not functional, the check meter reading may be used for recording the generation, with the concurrence of TNEB.

**Interconnection and Metering Facilities:** The Owner shall provide dedicated core for the check Metering.

**Communication Facilities:** In each site minimum communication facilities such as telephone or wireless will be provided.

### 4. CALCULATION OF EMISSION FIGURES

TASMA will be responsible to calculate the emission figures.

A computer software will be maintained by TASMA with the following functions:



- Identification Details of all sub Projects
- Location, Capacity of all sub projects
- Monthly Generation of all Sub Projects

## 5. LOCAL ENVIRONMENTAL CARE

A Simple operation control check list for EMS will be provided for each project site. The site engineer will carry out the operational control review once in 15 days and the report will be sent to TASMA. The non-conformities will be recorded and corrective actions will be taken.

The long term Environmental Management program will be reviewed once in a year.

## 6. CHANGES IN PROJECT BOUNDARY

Changes in Project boundary in any event will be monitored and recorded by TASMA.

### 7. DOCUMENTS AND RECORDS

Procedures based on ISO 9001: 2000 will be followed for controlling documents and records. Certification for ISO 9001: 2000 will be obtained after registration.

All documents will be numbered and identified along with retention periods.

The Key records that will be maintained are :

- Project Activity Matrix giving all ID details
- Daily Working Details of WTGs
- Daily Generation Details
- CERs Computed on a monthly basis
- Records of Management Review

## 8. PERIODIC REVIEW MEETINGS

Management Review meetings will be conducted by TASMA once in three months with all project participants. All project related matters will be discussed with a structured agenda, and action plans will be identified. The minutes of the meetings will be recorded.

## Appendix -1

### **<u>Project's Contribution to Sustainable Development</u>**

The Project sub activities in different locations contribute to the sustainable development of the region and country, by creating value in the economic, social and Environmental fronts. The various dimensions of the development attempted by the project activity are as under:

### **Contribution to Economic Value**



page 48

UNFCO

- Development of Rural / Backward areas
- Most of the sites where these wind mills are located are backward areas and the large scale presence of windmills here increase direct and indirect employment opportunities. Approximately 500 new direct employments have been generated.
- This way, the wind mill can contribute to country's rural development programs.
- The increasing demand in energy in the state of Tamilnadu can be met out by the energy share of wind mills
- Land Values have considerably increased
- Local trade and commerce activities such as shops, lodging- houses etc have increased
- New business areas like weigh- bridges etc, have opened up.

#### **Contribution to Environment**

- Wind power is a renewable energy and there is no depletion of resources
- There is no emission in wind power
- There is no treated effluent since there is no water consumption
- There is no problem of solid waste handling
- There not much of noise and heat emissions
- The Initial environmental study shows that there is no significant impact on land, water or air.
- The area around the windmill can be used for plantation. In fact TASMA has plans to plant Jetropa (Bio-Fuel) in all the sites.

#### **Contribution to Social Value**

- Most of the local labour are trained in wind mill operations and maintenance resulting in skill improvement
- Local people are exposed to new technology.
- Life style and culture of the local people have improved
- Transport facilities including roads and rails have improved
- Communication has improved drastically in the villages and in the remote hilly terrains, where the projects are situated.
- The project has brought road and approach paths to those areas.
- The windmill sites and approach paths have facilitated grazing of cattle.



	<u> Appendix –2 Abbreviations</u>
ABBREVIATIONS	MEANING
ACM	Approved Consolidated Methodology
BAU	Business As Usual
BEF	Baseline Emission Factor
BM	Build Margin
CDM	Clean Development Mechanism
CEA	Central Electricity Authority
CER	Certified Emission Reduction
СМ	Combined Margin
CO2	Carbon Dioxide
COP	Conference of Parties
DCS	Distributed Control System
DNA	Designated National Authority
DOE	Designated Operational Entity
DPR	Detailed Project Report
DSCR	Debt Service Coverage Ratio
EB	Executive Board
EIA	Environmental Impact Assessment
EMS	Environmental Management System
GHG	Green House Gases
HTSC	High Tension Service Connection
INR	Indian Rupees
IPCC	Inter Governmental Panel on Climatic Change
IPP	Independent Power Producers
IREDA	Indian Renewable Energy Development Agency
IRR	Internal Rate of Return
ISO	International Organization for standardization
KW	Kilowatt
MNES	Ministry of Non-Conventional Energy Sources
NCDMA	National CDM Authority
ODA	Official Development Assistant
OM	Operating Margin
PPA	Power Purchase Agreement
QA / QC	Quality Assurance / Quality Control
SEB	State Electricity Board
TASMA	Tamilnadu Spinning Mills Association
TNEB	Tamilnadu Electricity Board
TNPCB	Tamilnadu Pollution Control Board
TNERC	Tamil Nadu Electricity Regulatory Commission
TPS	Thermal Power Station
WTG	Wind Turbine Generator







Appendix – 3 –	- WTG	Identification,	Location and	l HTSC Number
----------------	-------	-----------------	--------------	---------------

Company	Company name	WTG	Capacity	LOCATION	Service
Code	(Sub-Project Owner)	No			Connection
					No
C0000001	SMP TEXTILES MILLS (P) LTD	1	600	THANDAYAR KULAM	791
C0000001	SMP TEXTILES MILLS (P) LTD	2	600	THANDAYAR KULAM	893
C0000002	PARANI SPINNING MILLS (P) LTD	1	1250	IRRUKANDURAI	777
C0000002	PARANI SPINNING MILLS (P) LTD	2	1250	IRRUKANDURAI	798
C0000002	PARANI SPINNING MILLS (P) LTD	3	1250	IRRUKANDURAI	970
C0000003	GUHAN TEXTILE MILLS (P) LTD	1	1250	DHANAKARKULAM	758
C0000003	GUHAN TEXTILE MILLS (P) LTD	2	1250	DHANAKARKULAM	776
C0000003	GUHAN TEXTILE MILLS (P) LTD	3	1250	DHANAKARKULAM	971
C0000004	SANDEEP WIND FARMS PVT.LTD.	1	1250	IRRUKANDURAI	795
C0000005	DEEKAY WIND FARMS (INDIA) PVT. LTD.	1	1250	KARUNKULAM	982
C0000006	SARANYA SPINNING MILLS (P) LTD	1	1250	RADHAPURAM	1147
C0000006	SARANYA SPINNING MILLS (P) LTD	2	1250	LEVENJIPURAM	1187
C0000007	SRI AMARAVATHI SPINNING MILLS	1	750	KONGALNAGARAM	456
C0000007	SRI AMARAVATHI SPINNING MILLS	2	750	KONGALNAGARAM	457
C0000007	SRI AMARAVATHI SPINNING MILLS	3	750	C.MALAYANDI PATTINAM	458
C000008	AJANTHA MILLS	1	225	PONNAPURAM	447
C0000008	AJANTHA MILLS	2	225	PONNAPURAM	447
C000008	AJANTHA MILLS	3	225	PONNAPURAM	447
C0000009	ARUN SPINNING MILLS P LTD	1	1250	KARUNKULAM	1120
C0000009	ARUN SPINNING MILLS P LTD	2	1250	IRRUKANDURAI	1323
C0000010	PALMAR MILLS PVT. LTD.	1	1250	Laxmipuram, Sithayan Kottai	748
C0000010	PALMAR MILLS PVT. LTD.	2	1250	Laxmipuram, Sithayan Kottai	749
C0000011	ISWARI SPINNING MILLS	1	500	Manduvelanpatti	329



C0000011	ISWARI SPINNING MILLS	2	500	NARANAPURAM	328
C0000011	ISWARI SPINNING MILLS	3	500	Manduvelanpatti	332
C0000011	ISWARI SPINNING MILLS	4	500	NARANAPURAM	333
C0000012	PAVATHAL SPINNING MILLS (P) LTD	1	1250	SANKANERI	851
C0000013	GOMUKI SPINNING MILLS (P) LTD	1	225	NARANAPURAM	737
C0000013	GOMUKI SPINNING MILLS (P) LTD	2	225	NARANAPURAM	738
C0000013	GOMUKI SPINNING MILLS (P) LTD	3	225	NARANAPURAM	739
C0000013	GOMUKI SPINNING MILLS (P) LTD	4	225	NARANAPURAM	740
C0000013	GOMUKI SPINNING MILLS (P) LTD	5	225	NARANAPURAM	740
C0000013	GOMUKI SPINNING MILLS (P) LTD	6	225	NARANAPURAM	739
C0000014	KARIKALI AMMAN SPINNINGMILLS(P)LTD	1	750	POLLACHI	475
C0000014	KARIKALI AMMAN SPINNINGMILLS(P)LTD	2	750	POLLACHI	484
C0000015	MOTHI SPINNERS LIMITED	1	1250	SANKANERI	750
C0000015	MOTHI SPINNERS LIMITED	2	1250	SANKANERI	757
C0000015	MOTHI SPINNERS LIMITED	3	1650	DHANAKARKULAM	1326
C0000016	SRI RATHINAGIRI SPINNERS (P) LTD	1	500	KARUNKULAM	881
C0000017	SENTHIL NATHAN SPINNING MILLS P LTD	1	1250	ILLANDAIKULAM	871
C0000018	SRI BALAMBIKA TEXTILE MILLS (P) LTD	1	600	KARUNKULAM	858
C0000018	SRI BALAMBIKA TEXTILE MILLS (P) LTD	2	600	KARUNKULAM	858
C0000019	CHOLA TEXTILES PRIVATE LIMITED	1	1250	IRRUKANDURAI	800
C0000019	CHOLA TEXTILES PRIVATE LIMITED	2	1250	IRRUKANDURAI	802
C0000019	CHOLA TEXTILES PRIVATE LIMITED	3	1250	IRRUKANDURAI	796
C0000019	CHOLA TEXTILES PRIVATE LIMITED	4	1250	IRRUKANDURAI	931
C0000020	CHERAN SPINNING MILLS PRV LTD	1	1250	KARUNKULAM	826
C0000020	CHERAN SPINNING MILLS PRV LTD	2	1250	IRRUKANDURAI	801
C0000020	CHERAN SPINNING MILLS	3	1250	KARUNKULAM	981



	PRV LTD				
C0000020	CHERAN SPINNING MILLS PRV LTD	4	1250	KARUNKULAM	1141
C0000021	PANDIAN TEXTILE MILLS PVT LTD	1	1250	KARUNKULAM	825
C0000021	PANDIAN TEXTILE MILLS PVT LTD	2	1250	KARUNKULAM	835
C0000021	PANDIAN TEXTILE MILLS PVT LTD	3	1250	IRRUKANDURAI	932
C0000021	PANDIAN TEXTILE MILLS PVT LTD	4	1250	KARUNKULAM	1139
C0000021	PANDIAN TEXTILE MILLS PVT LTD	5	1250	KARUNKULAM	1140
C0000022	MEERA TEXTILES PRIVATE LTD	1	1250	IRRUKANDURAI	799
C0000023	EXCEL COTSPIN(INDIA) PVT LTD	1	1250	IRRUKANDURAI	803
C0000024	SRI SHANMUGAVEL MILLS(P)LIMITED	1	750	KONGALNAGARAM	305 OF UED
C0000024	SRI SHANMUGAVEL MILLS(P)LIMITED	2	750	KONGALNAGARAM	305 OF UED
C0000024	SRI SHANMUGAVEL MILLS(P)LIMITED	3	750	KONGALNAGARAM	409
C0000024	SRI SHANMUGAVEL MILLS(P)LIMITED	4	750	PONNAPURAM	551
C0000024	SRI SHANMUGAVEL MILLS(P)LIMITED	5	750	PONNAPURAM	551
C0000024	SRI SHANMUGAVEL MILLS(P)LIMITED	6	750	KONGALNAGARAM	769
C0000024	SRI SHANMUGAVEL MILLS(P)LIMITED	7	1650	ANTHIYUR	800
C0000024	SRI SHANMUGAVEL MILLS(P)LIMITED	8	1650	ANTHIYUR	822
C0000025	SIVARAJ SPINNING MILLS (P) LIMITED	1	750	KONGALNAGARAM	3210FUEDC
C0000025	SIVARAJ SPINNING MILLS (P) LIMITED	2	750	KONGALNAGARAM	3210FUEDC
C0000025	SIVARAJ SPINNING MILLS (P) LIMITED	3	750	KONGALNAGARAM	322OFUEDC
C0000025	SIVARAJ SPINNING MILLS (P) LIMITED	4	750	KONGALNAGARAM	322OFUEDC
C0000025	SIVARAJ SPINNING MILLS (P) LIMITED	5	750	PONNAPURAM	5280FUEDC
C0000025	SIVARAJ SPINNING MILLS (P) LIMITED	6	750	PONNAPURAM	5280FUEDC



C0000025	SIVARAJ SPINNING MILLS (P) LIMITED	7	750	KONGALNAGARAM	768OFUEDC
C0000026	SUDHAN SPINNING MILLS (P) LIMITED	1	750	DASARPATTY	257ofUEDC
C0000026	SUDHAN SPINNING MILLS (P) LIMITED	2	750	DASARPATTY	257ofUEDC
C0000026	SUDHAN SPINNING MILLS (P) LIMITED	3	750	DASARPATTY	257ofUEDC
C0000026	SUDHAN SPINNING MILLS (P) LIMITED	4	750	DASARPATTY	257ofUEDC
C0000026	SUDHAN SPINNING MILLS (P) LIMITED	5	750	DASARPATTY	268ofUEDC
C0000026	SUDHAN SPINNING MILLS (P) LIMITED	6	750	DASARPATTY	268ofUEDC
C0000026	SUDHAN SPINNING MILLS (P) LIMITED	7	750	DASARPATTY	279ofUEDC
C0000026	SUDHAN SPINNING MILLS (P) LIMITED	8	750	DASARPATTY	280ofUEDC
C0000026	SUDHAN SPINNING MILLS (P) LIMITED	9	750	KONGALNAGARAM	410ofUEDC
C0000026	SUDHAN SPINNING MILLS (P) LIMITED	10	750	KONGALNAGARAM	714ofUEDC
C0000027	SRI VELAYADHAAWAMY SPINNING MILLS	1	750	DASARPATTY	2590FUEDC
C0000027	SRI VELAYADHAAWAMY SPINNING MILLS	2	750	DASARPATTY	2590FUEDC
C0000027	SRI VELAYADHAAWAMY SPINNING MILLS	3	750	DASARPATTY	2590FUEDC
C0000027	SRI VELAYADHAAWAMY SPINNING MILLS	4	750	DASARPATTY	2590FUEDC
C0000027	SRI VELAYADHAAWAMY SPINNING MILLS	5	750	KONGALNAGARAM	309OFUEDC
C0000027	SRI VELAYADHAAWAMY SPINNING MILLS	6	750	KONGALNAGARAM	309OFUEDC
C0000027	SRI VELAYADHAAWAMY SPINNING MILLS	7	750	KONGALNAGARAM	313OFUEDC
C0000027	SRI VELAYADHAAWAMY SPINNING MILLS	8	750	KONGALNAGARAM	386OFUEDC
C0000027	SRI VELAYADHAAWAMY SPINNING MILLS	9	750	PONNAPURAM	552OFUEDC
C0000027	SRI VELAYADHAAWAMY SPINNING MILLS	10	750	PONNAPURAM	552OFUEDC
C0000027	SRI VELAYADHAAWAMY SPINNING MILLS	11	750	KONGALNAGARAM	713OFUEDC
C000028	PRABHU SPINNING MILLS (P)	1	750	DASARPATTY	258



	LTD.,				
C0000028	PRABHU SPINNING MILLS (P) LTD.,	2	750	DASARPATTY	258
C0000028	PRABHU SPINNING MILLS (P) LTD.,	3	750	DASARPATTY	258
C0000028	PRABHU SPINNING MILLS (P) LTD.,	4	750	DASARPATTY	258
C0000028	PRABHU SPINNING MILLS (P) LTD.,	5	750	PONNAPURAM	266
C0000028	PRABHU SPINNING MILLS (P) LTD.,	6	750	PONNAPURAM	266
C0000028	PRABHU SPINNING MILLS (P) LTD.,	7	750	KONGALNAGARAM	315
C0000028	PRABHU SPINNING MILLS (P) LTD.,	8	750	KONGALNAGARAM	315
C0000028	PRABHU SPINNING MILLS (P) LTD.,	9	750	KONGALNAGARAM	315
C0000028	PRABHU SPINNING MILLS (P) LTD.,	10	750	PONNAPURAM	316
C0000029	PRABHU SPINNING MILLS (P) LTD.,	1	750	PONNAPURAM	554
C0000029	PRABHU SPINNING MILLS (P) LTD.,	2	750	PONNAPURAM	553
C0000029	PRABHU SPINNING MILLS (P) LTD.,	3	750	PONNAPURAM	550
C0000029	PRABHU SPINNING MILLS (P) LTD.,	4	750	PONNAPURAM	561
C0000029	PRABHU SPINNING MILLS (P) LTD.,	5	750	PONNAPURAM	561
C0000029	PRABHU SPINNING MILLS (P) LTD.,	6	750	PONNAPURAM	569
C0000029	PRABHU SPINNING MILLS (P) LTD.,	7	750	KONGALNAGARAM	783
C0000029	PRABHU SPINNING MILLS (P) LTD.,	8	750	KONGALNAGARAM	783
C0000030	ADISANKARA SPINNING MILLS (P) LTD.,	1	750	PONNAPURAM	267
C0000030	ADISANKARA SPINNING MILLS (P) LTD.,	2	750	PONNAPURAM	267
C0000030	ADISANKARA SPINNING MILLS (P) LTD.,	3	750	KONGALNAGARAM	306
C0000030	ADISANKARA SPINNING MILLS (P) LTD.,	4	750	KONGALNAGARAM	306
C0000030	ADISANKARA SPINNING MILLS (P) LTD.,	5	750	KONGALNAGARAM	307



C0000030	ADISANKARA SPINNING MILLS (P) LTD.,	6	750	KONGALNAGARAM	317
C0000030	ADISANKARA SPINNING MILLS (P) LTD.,	7	750	PONNAPURAM	525
C0000030	ADISANKARA SPINNING MILLS (P) LTD.,	8	750	PONNAPURAM	525
C0000030	ADISANKARA SPINNING MILLS (P) LTD.,	9	750	PONNAPURAM	526
C0000030	ADISANKARA SPINNING MILLS (P) LTD.,	10	750	PONNAPURAM	526
C0000030	ADISANKARA SPINNING MILLS (P) LTD.,	11	750	PONNAPURAM	562
C0000030	ADISANKARA SPINNING MILLS (P) LTD.,	12	750	PONNAPURAM	828
C0000031	SRI MATHA SPINNING MILLS (P) LTD.,	1	750	KONGALNAGARAM	314
C0000031	SRI MATHA SPINNING MILLS (P) LTD.,	2	750	KONGALNAGARAM	314
C0000031	SRI MATHA SPINNING MILLS (P) LTD.,	3	750	KONGALNAGARAM	314
C0000031	SRI MATHA SPINNING MILLS (P) LTD.,	4	750	KONGALNAGARAM	314
C0000031	SRI MATHA SPINNING MILLS (P) LTD.,	5	750	KONGALNAGARAM	314
C0000031	SRI MATHA SPINNING MILLS (P) LTD.,	6	750	KONGALNAGARAM	314
C0000031	SRI MATHA SPINNING MILLS (P) LTD.,	7	750	KONGALNAGARAM	314
C0000031	SRI MATHA SPINNING MILLS (P) LTD.,	8	750	PONNAPURAM	530
C0000031	SRI MATHA SPINNING MILLS (P) LTD.,	9	750	PONNAPURAM	530
C0000031	SRI MATHA SPINNING MILLS (P) LTD.,	10	750	PONNAPURAM	558
C0000031	SRI MATHA SPINNING MILLS (P) LTD.,	11	750	PONNAPURAM	583
C0000031	SRI MATHA SPINNING MILLS (P) LTD.,	12	750	PONNAPURAM	584
C0000031	SRI MATHA SPINNING MILLS (P) LTD.,	13	750	KONGALNAGARAM	781
C0000032	VEDHA SPINNING MILLS(P) LTD.,	1	750	KONGALNAGARAM	301
C0000032	VEDHA SPINNING MILLS(P) LTD.,	2	750	KONGALNAGARAM	301
C0000032	VEDHA SPINNING MILLS(P)	3	750	KONGALNAGARAM	302



	LTD.,				
C0000032	VEDHA SPINNING MILLS(P)	4	750	KONGALNAGARAM	303
	LTD.,				
C0000032	VEDHA SPINNING MILLS(P)	5	750	PONNAPURAM	555
	LTD.,				
C0000032	VEDHA SPINNING MILLS(P)	6	750	PONNAPURAM	556
	LTD.,				
C0000032	VEDHA SPINNING MILLS(P)	7	750	PONNAPURAM	557
<u></u>	LTD.,	0	750		500
C0000032	VEDHA SPINNING MILLS(P)	8	/50	PONNAPURAM	580
C0000022	VEDHA SDINNING MILLS(D)	0	750	KONGALNAGADAM	700
C0000032	I TD	9	730	KUNUALINAUAKAW	199
C0000034	SMT K INDIRA	1	750	KONGALNAGARAM	296
C0000034	SMT K INDIRA	2	750	KONGALNAGARAM	304
C0000034	SMT K INDIRA	3	750	KONGALNAGARAM	792
C0000035	SRIC KANDASWAMY	1	750	KONGALNAGARAM	297
C0000035	SRIC KANDASWAMY	2	750	KONGALNAGARAM	297
C0000035	SRIC KANDASWAMY	3	750	KONGALNAGARAM	297
C0000036	SRI P.S. VELUSAMY	1	750	KONGALNAGARAM	308
C0000036	SRI P.S. VELUSAMY	2	750	KONGALNAGARAM	308
C0000036	SRI P.S. VELUSAMY	3	750	KONGALNAGARAM	396
C0000037	SMT. V. DHANALAKSHMI	1	750	KONGALNAGARAM	310
C0000037	SMT. V. DHANALAKSHMI	2	750	KONGALNAGARAM	311
C0000037	SMT. V. DHANALAKSHMI	3	750	KONGALNAGARAM	411
C0000038	SMT. R. GEETHA	1	750	PONNAPURAM	579
C0000039	SMT R. UMAMAHESHWARI	1	750	KONGALNAGARAM	790
C0000040	SMT. J. JAYALAKSHMI	1	750	KONGALNAGARAM	791
C0000041	SMT.S.SHANTHI	1	750	KONGALNAGARAM	795
C0000042	SMT.S.GOWTHAMI	1	750	KONGALNAGARAM	7970FUEDC
C0000043	SMT.S.VEENA ABIRAMI	1	750	KONGALNAGARAM	7980FUEDC
C0000044	RASI TECHNITEX(P) LTD	1	1250	THANDAYAR KULAM	556
C0000045	RASI SEEDS (P) LTD	1	1250	PALLADAM	285
C0000045	RASI SEEDS (P) LTD	2	1250	PALLADAM	286
C0000045	RASI SEEDS (P) LTD	3	1250	PALLADAM	287
C0000045	RASI SEEDS (P) LTD	4	1250	PALLADAM	288
C0000045	RASI SEEDS (P) LTD	5	1250	PALLADAM	300
C0000046	SAMBA PUBLISHING	1	600	THANDAYAR KULAM	1052
	COMPANY PVT LTD				
C0000047	JEYAM AND COMPANY	1	600	PANAGUDI	619
C0000048	VINAYAGAR SPINNING	1	225	PONNAPURAM	sn101
	MILLS				
C0000048	VINAYAGAR SPINNING	2	225	PONNAPURAM	sn102



	MILLS				
C0000048	VINAYAGAR SPINNING	3	225	PONNAPURAM	sn103
	MILLS				
C0000048	VINAYAGAR SPINNING	4	225	PONNAPURAM	sn104
	MILLS				
C0000048	VINAYAGAR SPINNING	5	225	PONNAPURAM	sn105
	MILLS				
C0000049	SPICTEX	1	1250	DHANAKARKULAM	sn106
C0000049	SPICTEX	2	1250	DHANAKARKULAM	sn107
C0000049	SPICTEX	3	250	NARANAPURAM	sn108
C0000049	SPICTEX	4	250	NARANAPURAM	sn109
C0000049	SPICTEX	5	250	NARANAPURAM	sn110
C0000049	SPICTEX	6	250	NARANAPURAM	sn111
C0000049	SPICTEX	7	250	NARANAPURAM	sn112
C0000050	CENTWIN TEXTILE MILLS (P) LTD	1	1250	DHANAKARKULAM	751
C0000050	CENTWIN TEXTILE MILLS (P) LTD	2	1250	DHANAKARKULAM	778
C0000051	THURAN SPG MILLS P LTD	1	1250	IRRUKANDURAI	797
C0000051	THURAN SPG MILLS P LTD	2	1250	KARUNKULAM	824
C0000052	S.P.SPINNING MILLS PVT LIMITED	4	600	PAZHAVOOR	504
C0000052	S.P.SPINNING MILLS PVT LIMITED	5	600	PAZHAVOOR	505
C0000052	S.P.SPINNING MILLS PVT LIMITED	6	600	PANAGUDI	702
C0000052	S.P.SPINNING MILLS PVT LIMITED	7	600	PANAGUDI	703
C0000052	S.P.SPINNING MILLS PVT LIMITED	8	600	PANAGUDI	704
C0000053	KUTTI SPINNERS PRIVATE LTD	1	1250	SANKANERI	494
C0000053	KUTTI SPINNERS PRIVATE LTD	2	750	AYAKUDI	1071
C0000054	MEHALA CARONA TEXTILES (P) LTD.	1	500	LEVENJIPURAM	882
C0000054	MEHALA CARONA TEXTILES (P) LTD.	2	500	KARUNKULAM	883
C0000054	MEHALA CARONA TEXTILES (P) LTD.	3	500	KARUNKULAM	884
C0000054	MEHALA CARONA TEXTILES (P) LTD.	4	500	KARUNKULAM	885
C0000054	MEHALA CARONA TEXTILES (P) LTD.	5	500	RADHAPURAM	1230



C0000054	MEHALA CARONA TEXTILES (P) LTD.	6	500	RADHAPURAM	1231
C0000054	MEHALA CARONA TEXTILES (P) LTD.	7	500	RADHAPURAM	1313
C0000054	MEHALA CARONA TEXTILES (P) LTD.	8	500	RADHAPURAM	1314
C0000054	MEHALA CARONA TEXTILES (P) LTD.	9	500	RADHAPURAM	1315
C0000054	MEHALA CARONA TEXTILES (P) LTD.	10	500	RADHAPURAM	1316
C0000055	AMARAVATHI TEXTILES	1	500	MUNDUVELANPATTY	336
C0000055	AMARAVATHI TEXTILES	2	850	IRRUKANDURAI	1304
C0000056	SRI SARVANA SPINNING MILLS	1	1250	IRRUKANDURAI	200
C0000057	SRI BALAJI & CO	1	750	K G PALAYAM	531
C0000058	ASHWINI TRADERS	1	750	K G PALAYAM	533
C0000059	SHREE TIRUPATI COTTON CORP.	1	750	K G PALAYAM	532
C0000060	SHREE SIDDIVINAYAKA COTTON CORP.	1	750	K G PALAYAM	529
C0000061	SRI BALAJI & CO.	1	230	K G PALAYAM	565
C0000062	SRI RADHALAKSMI COTTON P LTD	1	230	K G PALAYAM	564
C0000063	ANNAMALAIAR MILLS PRIVATE LTD	1	750	KONGALNAGARAM	403
C0000064	GANGOTHRI TEXTILES UNIT I	1	1650	ANTHIYUR	582
C0000065	GANGOTHRI TEXTILES LTD UNIT II	1	1650	MUKKODUJALLIPATT Y	756
C0000066	ARUN TEXTILES (P) LTD	1	600	THANDAYAR KULAM	729
C0000066	ARUN TEXTILES (P) LTD	2	600	THANDAYAR KULAM	730
C0000066	ARUN TEXTILES (P) LTD	3	600	THANDAYAR KULAM	731
C0000066	ARUN TEXTILES (P) LTD	4	600	THANDAYAR KULAM	738
C0000066	ARUN TEXTILES (P) LTD	5	600	THANDAYAR KULAM	732
C0000066	ARUN TEXTILES (P) LTD	6	600	THANDAYAR KULAM	733
C0000066	ARUN TEXTILES (P) LTD	7	600	THANDAYAR KULAM	848
C0000066	ARUN TEXTILES (P) LTD	8	600	THANDAYAR KULAM	849
C0000066	ARUN TEXTILES (P) LTD	9	1250	DHANAKARKULAM	610
C0000067	THIRUPUR SURIYA TEXTILES PVT. LTD.,	1	1250	IRRUKANDURAI	629
C0000067	THIRUPUR SURIYA TEXTILES PVT. LTD.,	2	1250	IRRUKANDURAI	654
C0000067	THIRUPUR SURIYA TEXTILES PVT. LTD.,	3	750	SINJUVADI	568



C0000067	THIRUPUR SURIYA TEXTILES PVT. LTD.,	4	750	SINJUVADI	569
C0000067	THIRUPUR SURIYA TEXTILES PVT. LTD.,	5	750	SINJUVADI	570
C0000068	M/S. NARASU"S SPINNING MILLS	1	600	KARUNKULAM	637
C0000069	VEEJAY LAKSHMI TEXTILES LTD	1	600	DHANAKARKULAM	1094
C0000069	VEEJAY LAKSHMI TEXTILES LTD	2	600	DHANAKARKULAM	1094
C0000069	VEEJAY LAKSHMI TEXTILES LTD	3	600	DHANAKARKULAM	1094
C0000070	VEEJAY LAKSHMI ENGINEERING WORKS LI	1	750	SINJUVADI	572
C0000070	VEEJAY LAKSHMI ENGINEERING WORKS LI	2	600	IRRUKANDURAI	1015
C0000071	VEEJAY SALES & SERVICES LYD	1	750	SINJUVADI	511
C0000072	ANANGOOR TEXTILE MILLS PVT LTD	1	750	KONGALNAGARAM	387
C0000072	ANANGOOR TEXTILE MILLS PVT LTD	2	750	PONNAPURAM	563
C0000073	ERODE ANNAI SPINNING MILLS (P) LTD.	1	750	K G PALAYAM	855
C0000073	ERODE ANNAI SPINNING MILLS (P) LTD.	2	750	K G PALAYAM	856
C0000074	ASWIN TEXTILES PVT LTD	1	1250	DHANAKARKULAM	664
C0000074	ASWIN TEXTILES PVT LTD	2	1250	DHANAKARKULAM	663
C0000075	MAXWELL INDUSTRIES LTD.	1	350	EDYAR PALAYAM	301
C0000076	V.S.N.C NARASIMHA CHETTIAR SONS	1	500	LEVENJIPURAM	695
C0000076	V.S.N.C NARASIMHA CHETTIAR SONS	2	500	TENKASI	1206
C0000077	A.D. TEXTILE	1	500	LEVENJIPURAM	720
C0000078	SSM FINE YARNS	1	350	METRATHI	812
C0000079	SRI SARAVANA SPINNING (P) LTD	1	1250	DHANAKARKULAM	508
C0000079	SRI SARAVANA SPINNING (P) LTD	2	1250	DHANAKARKULAM	525
C0000079	SRI SARAVANA SPINNING (P) LTD	3	1250	METRATHI	392
C0000079	SRI SARAVANA SPINNING (P) LTD	4	1250	METRATHI	496
C0000079	SRI SARAVANA SPINNING (P) LTD	5	1250	DHANAKARKULAM	917





C0000079	SRI SARAVANA SPINNING (P) LTD	6	1250	DHANAKARKULAM	526
C0000079	SRI SARAVANA SPINNING (P) LTD	7	1250	DHANAKARKULAM	527
C0000079	SRI SARAVANA SPINNING (P) LTD	8	1250	METRATHI	391
C0000079	SRI SARAVANA SPINNING (P) LTD	9	1250	METRATHI	391
C0000079	SRI SARAVANA SPINNING (P) LTD	10	1250	METRATHI	495
C0000080	POPPYS KNITWEAR PRIVATE LTD	1	1250	SANKANERI	633
C0000081	JAYAVARMA TEXTILES (P) PVT LTD	1	500	KARUNKULAM	446
C0000081	JAYAVARMA TEXTILES (P) PVT LTD	2	500	KARUNKULAM	461
C0000081	JAYAVARMA TEXTILES (P) PVT LTD	3	1250	SANKANERI	591
C0000081	JAYAVARMA TEXTILES (P) PVT LTD	4	1250	SANKANERI	592
C0000082	SRIRENUGAGINNING&OILSPI NNINGMILLS	2	750	TENKASI	1072
C0000082	SRIRENUGAGINNING&OILSPI NNINGMILLS	3	750	TENKASI	1083
C0000083	TRIDENT TEXTILE MILLS LTD	1	1250	IRRUKANDURAI	903
C0000084	LEEDS EXPORTS	1	225	PONNAPURAM	312
C0000084	LEEDS EXPORTS	2	225	PONNAPURAM	312
C0000084	LEEDS EXPORTS	3	225	PONNAPURAM	502
C0000084	LEEDS EXPORTS	4	225	PONNAPURAM	503
C0000084	LEEDS EXPORTS	5	225	PONNAPURAM	504
C0000085	KANDHAN KNITSS	1	750	CHINNA PUTHUR	760
C0000086	CHERAN SPINNER LTD	1	500	LEVENJIPURAM	212
C0000086	CHERAN SPINNER LTD	2	500	LEVENJIPURAM	213
C0000086	CHERAN SPINNER LTD	3	750	LEVENJIPURAM	638
C0000086	CHERAN SPINNER LTD	4	750	LEVENJIPURAM	662
C0000087	PALLAVA TEXILE LIMITED	1	750	LEVENJIPURAM	768
C0000087	PALLAVA TEXILE LIMITED	2	750	LEVENJIPURAM	841
C0000087	PALLAVA TEXILE LIMITED	3	750	LEVENJIPURAM	1150
C0000088	V.S.M.WEAVES INDIA LIMITED	1	750	RADHAPURAM	766
C0000088	V.S.M.WEAVES INDIA LIMITED	2	750	RADHAPURAM	1129
C000088	V.S.M.WEAVES INDIA	3	750	RADHAPURAM	1151



	LIMITED				
C0000089	ARMSTRONG SPINNING	1	500	KARUNKULAM	463
	MILLS (P) LTD				
C0000089	ARMSTRONG SPINNING	2	1250	DHANAKARKULAM	829
	MILLS (P) LTD				
C0000089	ARMSTRONG SPINNING	3	1250	DHANAKARKULAM	831
	MILLS (P) LTD				
C0000090	ARMSTRONG KNITTING	1	500	PAZHAVOOR	1080
	MILLS				
C0000090	ARMSTRONG KNITTING	2	500	IRRUKANDURAI	1081
	MILLS				
C0000090	ARMSTRONG KNITTING	3	500	IRRUKANDURAI	1110
	MILLS				
C0000090	ARMSTRONG KNITTING	4	500	PAZHAVOOR	1138
	MILLS				
C0000090	ARMSTRONG KNITTING	5	1250	DHANAKARKULAM	915
	MILLS				
C0000090	ARMSTRONG KNITTING	6	1250	DHANAKARKULAM	1060
<b>2</b> 0000001	MILLS		1070		
C0000091	ARMSTRONG KNITTING	1	1250	DHANAKARKULAM	514
G0000001	MILLS (P) LTD.,	2	500		170
C0000091	ARMSTRONG KNITTING	2	500	LEVENJIPURAM	478
<u></u>	MILLS (P) LID.,	1	050		1202
C0000092	SRIPATHI PAPER AND	1	850	TIRUNELVELI	1302
C0000002		1	1250		100
C0000093	SURANALARSINI SPINING MILLS DI TD	1	1250	DHANAKAKKULAM	490
C0000004	DIVVA SDINNING MILLS (D)	1	1250		503
C0000094	I TD	1	1230	DHANAKAKKULAW	595
C0000004	DIVVA SPINNING MILLS (P)	2	750	I EVENIIDI ID AM	11/6
C0000094	I TD	2	750		1140
C0000095	LEEDS SPINNING MILLS PVT	4	1250	DHANAKARKUI AM	590
0000075	LTD		1230		570
C0000095	LEEDS SPINNING MILLS PVT	5	250	PAZHAVOOR	618
000000000		5	200		010
C0000095	LEEDS SPINNING MILLS PVT	6	250	PAZHAVOOR	650
	LTD	-			
C0000095	LEEDS SPINNING MILLS PVT	7	250	PAZHAVOOR	673
	LTD				
C0000096	S.S. SPINNING MILLS	1	750	K G PALAYAM	662
C0000096	S.S. SPINNING MILLS	2	750	KONGALNAGARAM	793
C0000096	S.S. SPINNING MILLS	3	750	KONGALNAGARAM	794
C0000096	S.S. SPINNING MILLS	4	750	KONGALNAGARAM	796
C0000097	SAKTHI MASALA (P) LTD	1	1650	ANTHIYUR	691
C0000098	EVEREADY SPINNING MILLS	1	1250	IRRUKANDURAI	486
20000070		1	1250		100



	(P) LIMITED				
C0000098	EVEREADY SPINNING MILLS (P) LIMITED	2	1250	IRRUKANDURAI	480
C0000098	EVEREADY SPINNING MILLS (P) LIMITED	3	1250	DHANAKARKULAM	833
C0000098	EVEREADY SPINNING MILLS (P) LIMITED	4	1250	DHANAKARKULAM	910
C0000099	MANI SPINNING MILLS (P) LTD	1	1250	IRRUKANDURAI	484
C0000099	MANI SPINNING MILLS (P) LTD	2	1250	IRRUKANDURAI	485
C0000099	MANI SPINNING MILLS (P) LTD	3	1250	IRRUKANDURAI	832
C0000099	MANI SPINNING MILLS (P) LTD	4	1250	IRRUKANDURAI	911
C0000099	MANI SPINNING MILLS (P) LTD	5	600	THANDAYAR KULAM	790
C0000100	JANSONS TEXILE PROCESSORS	1	1250	SANKANERI	492
C0000101	SRI SRINIVASA PROCESSORS	2	230	PALLADAM	249
C0000102	ROGINI MILLS	1	500	PONNAPURAM	455
C0000102	ROGINI MILLS	2	500	PONNAPURAM	455
C0000102	ROGINI MILLS	3	500	PONNAPURAM	501
C0000103	L.G. BALAKRISHNAN& BROS. LTD.,	6	500	ANAIKULAM	1255
C0000103	L.G. BALAKRISHNAN& BROS. LTD.,	7	500	ANAIKULAM	1256
C0000103	L.G. BALAKRISHNAN& BROS. LTD.,	8	500	ANAIKULAM	1257
C0000104	S.K.T. TEXTILE MILLS	1	500	LEVENJIPURAM	693
C0000105	VANITHA TEXTILES	1	500	LEVENJIPURAM	438
C0000106	JAYAVISHNU SPINTEX (P) LTD	1	500	PONNAPURAM	347
C0000106	JAYAVISHNU SPINTEX (P) LTD	2	500	PONNAPURAM	348
C0000107	K.M KNITWAER	1	225	PONNAPURAM	367
C0000107	K.M KNITWAER	2	225	PONNAPURAM	677
C0000108	S.N.Q.S INTERNATIONAL	1	225	PONNAPURAM	377
C0000108	S.N.Q.S INTERNATIONAL	2	225	PONNAPURAM	776
C0000109	VASU YARN MILLS INDIA (P) LTD	1	225	GOVINDAPURAM	sn113
C0000109	VASU YARN MILLS INDIA (P) LTD	2	225	GOVINDAPURAM	sn114
C0000109	VASU YARN MILLS INDIA (P)	3	225	GOVINDAPURAM	sn115



	LTD				
C0000109	VASU YARN MILLS INDIA (P) LTD	4	225	GOVINDAPURAM	sn116
C0000109	VASU YARN MILLS INDIA (P) LTD	5	225	PONNAPURAM	sn117
C0000109	VASU YARN MILLS INDIA (P) LTD	6	225	PONNAPURAM	sn118
C0000110	SJLT TEXTILES (P) LTD	1	225	THASARPATTY	SC NO.426
C0000110	SJLT TEXTILES (P) LTD	2	225	METRATHI	SC NO.523
C0000110	SJLT TEXTILES (P) LTD	3	225	METRATHI	SC NO.687
C0000110	SJLT TEXTILES (P) LTD	4	225	METRATHI	SC NO.744
C0000111	BEST COTTON MILLS PVT. LTD.,	1	1250	IRRUKANDURAI	804
C0000111	BEST COTTON MILLS PVT. LTD.,	2	1250	IRRUKANDURAI	805
C0000111	BEST COTTON MILLS PVT. LTD.,	3	1250	IRRUKANDURAI	627
C0000111	BEST COTTON MILLS PVT. LTD.,	4	1250	IRRUKANDURAI	628
C0000112	SAKTHI MURUGAN AGRO FOODS LTD	1	225	UDUMALPET	256
C0000112	SAKTHI MURUGAN AGRO FOODS LTD	2	320	UDUMALPET	334
C0000112	SAKTHI MURUGAN AGRO FOODS LTD	3	320	UDUMALPET	335
C0000112	SAKTHI MURUGAN AGRO FOODS LTD	4	320	UDUMALPET	494
C0000113	SAKTHI MURUGAN ROLLERFLOURMILLS LTD	1	225	UDUMALPET	255
C0000113	SAKTHI MURUGAN ROLLERFLOURMILLS LTD	2	500	UDUMALPET	468
C0000114	SAKTHI MURUGAN WIND FARM	1	225	DHARAPURAM	879
C0000114	SAKTHI MURUGAN WIND FARM	2	225	PONNAPURAM	879
C0000115	SAKTHE WIND FARM	1	225	DHARAPURAM	876
C0000115	SAKTHE WIND FARM	2	225	PONNAPURAM	sn119
C0000116	SHRI KARTHIKAYAN POWER FARM	1	225	PONNAPURAM	sn120
C0000117	SHREYA POWER FARM	1	225	PONNAPURAM	sn121
C0000118	CHINTHAMANI FOODS & FEEDS (P) LTD	1	350	Pappampatti	389/2005
C0000119	KANDAGIRI SPINNING MILLS LTD	1	750	PANAGUDI	472
C0000119	KANDAGIRI SPINNING MILLS	2	750	PANAGUDI	473



	LTD				
C0000119	KANDAGIRI SPINNING MILLS LTD	3	500	PAZHAVOOR	499
C0000119	KANDAGIRI SPINNING MILLS LTD	4	500	PAZHAVOOR	500
C0000119	KANDAGIRI SPINNING MILLS LTD	5	600	PAZHAVOOR	502
C0000119	KANDAGIRI SPINNING MILLS LTD	6	600	PAZHAVOOR	503
C0000119	KANDAGIRI SPINNING MILLS LTD	7	600	PAZHAVOOR	511
C0000119	KANDAGIRI SPINNING MILLS LTD	8	600	PAZHAVOOR	512
C0000119	KANDAGIRI SPINNING MILLS LTD	9	1250	UDAYATHUR VILLAGE	1078
C0000120	MALLUR SIDDESWARA SPINNING MILLS	1	750	PANAGUDI	474
C0000120	MALLUR SIDDESWARA SPINNING MILLS	2	750	PANAGUDI	475
C0000120	MALLUR SIDDESWARA SPINNING MILLS	3	1250	SANKANERI	1079
C0000121	THE CHENNAI SILKS	1	500	VARAPATTI	426
C0000122	MOUNTAIN SPINNING MILLS LTD	1	750	KONGALNAGARAM	419
C0000122	MOUNTAIN SPINNING MILLS LTD	2	750	KONGALNAGARAM	422
C0000122	MOUNTAIN SPINNING MILLS LTD	3	1650	PERUNGUDI	1104
C0000124	NILGIRI TEXTILE (P) LTD	1	600	TIRUNELVELI	SC 1102
C0000125	AMBIKA COTTON MILLS LTD	1	600	IRRUKANDURAI	647
C0000125	AMBIKA COTTON MILLS LTD	2	600	DHANAKARKULAM	648
C0000125	AMBIKA COTTON MILLS LTD	3	600	DHANAKARKULAM	648
C0000125	AMBIKA COTTON MILLS LTD	4	600	DHANAKARKULAM	648
C0000125	AMBIKA COTTON MILLS LTD	5	600	KARUNKULAM	646
C0000125	AMBIKA COTTON MILLS LTD	6	600	PAZHAVOOR	649
C0000125	AMBIKA COTTON MILLS LTD	7	600	PAZHAVOOR	649
C0000125	AMBIKA COTTON MILLS LTD	8	600	DHANAKARKULAM	649
C0000125	AMBIKA COTTON MILLS LTD	9	600	PAZHAVOOR	651
C0000125	AMBIKA COTTON MILLS LTD	10	600	PAZHAVOOR	651
C0000125	AMBIKA COTTON MILLS LTD	11	600	IRRUKANDURAI	651
C0000125	AMBIKA COTTON MILLS LTD	12	800	GOVINDAPURAM	651
C0000125	AMBIKA COTTON MILLS LTD	13	800	GOVINDAPURAM	651
C0000125	AMBIKA COTTON MILLS LTD	14	800	GOVINDAPURAM	651
C0000125	AMBIKA COTTON MILLS LTD	15	800	GOVINDAPURAM	651



C0000125 C0000125 C0000125 C0000125	AMBIKA COTTON MILLS LTD AMBIKA COTTON MILLS LTD AMBIKA COTTON MILLS LTD AMBIKA COTTON MILLS LTD FASTMAN SPINNING MILLS	16 17 18	800 800 800	GOVINDAPURAM GOVINDAPURAM	651 651
C0000125 C0000125 C0000125	AMBIKA COTTON MILLS LTD AMBIKA COTTON MILLS LTD AMBIKA COTTON MILLS LTD FASTMAN SPINNING MILLS	17 18 19	800 800	GOVINDAPURAM	651
C0000125 C0000125	AMBIKA COTTON MILLS LTD AMBIKA COTTON MILLS LTD FASTMAN SPINNING MILLS	18 19	800		651
C0000125	AMBIKA COTTON MILLS LTD	10		GOVINDAFUKAM	1001
G0000106	FASTMAN SPINNING MILLS	1)	800	GOVINDAPURAM	651
C0000126	(P)LIMITED	1	1250	SANKANERI	581
C0000126	EASTMAN SPINNING MILLS (P)LIMITED	2	1250	SANKANERI	746
C0000126	EASTMAN SPINNING MILLS (P)LIMITED	3	1250	SANKANERI	747
C0000127	EASTMANEXPORTSGLOBAL CLOTHINGPVT.LTD	1	500	SELAIKARACHEL	382
C0000127	EASTMANEXPORTSGLOBAL CLOTHINGPVT.LTD	2	500	SELAIKARACHEL	383
C0000127	EASTMANEXPORTSGLOBAL CLOTHINGPVT.LTD	3	500	SELAIKARACHEL	384
C0000127	EASTMANEXPORTSGLOBAL CLOTHINGPVT.LTD	4	500	SELAIKARACHEL	419
C0000127	EASTMANEXPORTSGLOBAL CLOTHINGPVT.LTD	5	1250	SANKANERI	582
C0000127	EASTMANEXPORTSGLOBAL CLOTHINGPVT.LTD	6	1250	SANKANERI	583
C0000128	INDIA DYEING MILLS PVT. LTD.,	1	500	SELAIKARACHEL	377
C0000128	INDIA DYEING MILLS PVT. LTD.,	2	500	SELAIKARACHEL	378
C0000128	INDIA DYEING MILLS PVT. LTD.,	3	500	SELAIKARACHEL	379
C0000128	INDIA DYEING MILLS PVT. LTD.,	4	500	SELAIKARACHEL	380
C0000129	SHRI HARI PROCESS	1	1250	SANKANERI	612
C0000129	SHRI HARI PROCESS	2	500	SELAIKARACHEL	368
C0000130	PRASANNA SPINNING MILLS	1	750	KONGALNAGARAM	417
C0000130	PRASANNA SPINNING MILLS	2	750	KONGALNAGARAM	418
C0000130	PRASANNA SPINNING MILLS	3	750	PONNAPURAM	559
C0000130	PRASANNA SPINNING MILLS	4	250	SELAIKARACHEL	357
C0000131	THE TUTICORIN SPINNING MILLS LTD	1	750	PANNAIKENARU	420
C0000131	THE TUTICORIN SPINNING MILLS LTD	2	750	GOMANGALAM	421
C0000131	THE TUTICORIN SPINNING MILLS LTD	3	1650	PERUNGUDI	946
C0000132	SRI GANASA TEXTILE (P) LTD	1	225	PONNAPURAM	365



C0000132	SRI GANASA TEXTILE (P) LTD	2	225	PONNAPURAM	365
C0000132	SRI GANASA TEXTILE (P) LTD	3	225	DHARAPURAM	365
C0000132	SRI GANASA TEXTILE (P) LTD	4	225	PONNAPURAM	366
C0000132	SRI GANASA TEXTILE (P) LTD	5	225	PONNAPURAM	366
C0000132	SRI GANASA TEXTILE (P) LTD	6	225	DHARAPURAM	366
C0000132	SRI GANASA TEXTILE (P) LTD	7	225	PONNAPURAM	589
C0000132	SRI GANASA TEXTILE (P) LTD	8	225	PONNAPURAM	589
C0000132	SRI GANASA TEXTILE (P) LTD	9	225	PONNAPURAM	609
C0000132	SRI GANASA TEXTILE (P) LTD	10	225	PONNAPURAM	609
C0000132	SRI GANASA TEXTILE (P) LTD	11	225	PONNAPURAM	609
C0000132	SRI GANASA TEXTILE (P) LTD	12	225	PONNAPURAM	682
C0000132	SRI GANASA TEXTILE (P) LTD	13	225	PONNAPURAM	683
C0000132	SRI GANASA TEXTILE (P) LTD	14	225	PONNAPURAM	620
C0000132	SRI GANASA TEXTILE (P) LTD	15	225	PONNAPURAM	619
C0000132	SRI GANASA TEXTILE (P) LTD	16	225	PONNAPURAM	619
C0000132	SRI GANASA TEXTILE (P) LTD	17	225	PONNAPURAM	620
C0000132	SRI GANASA TEXTILE (P) LTD	18	225	PONNAPURAM	620
C0000132	SRI GANASA TEXTILE (P) LTD	19	225	PONNAPURAM	609
C0000132	SRI GANASA TEXTILE (P) LTD	20	225	PONNAPURAM	609
C0000133	FEMINA SPINNING MILLS LIMITED	1	500	PANAGUDI	1006
C0000134	JAYALAKSHMI TEXTILES (P) LTD.,	1	750	PANAGUDI	425
C0000134	JAYALAKSHMI TEXTILES (P) LTD.,	2	750	PANAGUDI	427
C0000134	JAYALAKSHMI TEXTILES (P)	3	1650	Vadakkankulam	1327



	LTD.,				
C0000135	SRI KARVEMBU TEXTILES PRIVATE LTD	1	225	NARANAPURAM	650
C0000135	SRI KARVEMBU TEXTILES PRIVATE LTD	2	225	NARANAPURAM	650
C0000135	SRI KARVEMBU TEXTILES PRIVATE LTD	3	225	NARANAPURAM	651
C0000135	SRI KARVEMBU TEXTILES PRIVATE LTD	4	225	NARANAPURAM	652
C0000136	SCM CREATIONS	1	750	SEKARAM VADAKADU VILLAGE	8
C0000136	SCM CREATIONS	2	750	SEKARAM VADAKADU VILLAGE	7
C0000136	SCM CREATIONS	3	1250	UDAYATHUR VILLAGE	1135
C0000136	SCM CREATIONS	4	1250	UDAYATHUR VILLAGE	1239
C0000136	SCM CREATIONS	5	1250	UDAYATHUR VILLAGE	1221
C0000136	SCM CREATIONS	6	1250	UDAYATHUR VILLAGE	1222
C0000136	SCM CREATIONS	7	1250	UDAYATHUR VILLAGE	1137
C0000137	SCMTEXTILESPINNERS(UNIT OFTCSTEXTILE	1	1250	DHANAKARKULAM	529
C0000137	SCMTEXTILESPINNERS(UNIT OFTCSTEXTILE	2	1250	DHANAKARKULAM	595
C0000137	SCMTEXTILESPINNERS(UNIT OFTCSTEXTILE	3	1250	VADAVALLI	387
C0000137	SCMTEXTILESPINNERS(UNIT OFTCSTEXTILE	4	1250	VADAVALLI	385
C0000137	SCMTEXTILESPINNERS(UNIT OFTCSTEXTILE	5	500	VADAMBACHERRY VILLAGE	432
C0000137	SCMTEXTILESPINNERS(UNIT OFTCSTEXTILE	6	500	VADAMBACHERRY VILLAGE	427
C0000137	SCMTEXTILESPINNERS(UNIT OFTCSTEXTILE	7	500	VADAMBACHERRY VILLAGE	433
C0000137	SCMTEXTILESPINNERS(UNIT OFTCSTEXTILE	8	500	VADAMBACHERRY VILLAGE	431
C0000137	SCMTEXTILESPINNERS(UNIT OFTCSTEXTILE	9	500	VARAPATTI	428
C0000137	SCMTEXTILESPINNERS(UNIT OFTCSTEXTILE	10	500	VADAMBACHERRY VILLAGE	429
C0000137	SCMTEXTILESPINNERS(UNIT OFTCSTEXTILE	11	500	VADAMBACHERRY VILLAGE	430



C0000138	ARASAN SYNTEX LTD.,	1	1250	DHANAKARKULAM	665
C0000138	ARASAN SYNTEX LTD.,	2	1250	IRRUKANDURAI	808
C0000138	ARASAN SYNTEX LTD.,	3	1250	CHETTYKULAM	1238
C0000139	VENNILAKSHMI MILLS (P) LTD.,	1	500	POOLANKINER	871
C0000140	M.T.A. MILLS PRIVATE LIMITED	1	500	PONNAPURAM	450
C0000141	SALONA COTSPIN LTD.,	1	750	PANAGUDI	540
C0000141	SALONA COTSPIN LTD.,	2	750	PANAGUDI	541
C0000141	SALONA COTSPIN LTD.,	3	750	SINJUVADI	823
C0000142	STATUS SPINNING MILLS P LTD	1	500	LEVENJIPURAM	1262
C0000143	C.V. SPINNERS (P) LIMITED	1	750	C.MALAYANDI PATTINAM	355
C0000144	SRI PRIYALAKSHMI SPINNERS (P) LTD.,	1	750	C.MALAYANDI PATTINAM	356
C0000145	RAJAVE TEXTILES (P) LTD.,	1	230	K G PALAYAM	121
C0000146	S.P.TEXTILES	1	230	BOGAMPATTI VILLAGE	250
C0000147	S.P.APPARELS	2	230	METRATHI	659
C0000147	S.P.APPARELS	3	600	PARIVARI SURIYAN	1062
C0000147	S.P.APPARELS	4	600	DHANAKARKULAM	1101
C0000148	MOUNTAIN LEASING CO. PVT. LTD.,	1	750	ANTHIYUR	573
C0000149	SUMMER INDIA TEXTILE MILLS (P) LTD.	1	1250	UDUMALPET	567
C0000149	SUMMER INDIA TEXTILE MILLS (P) LTD.	2	1250	UDUMALPET	586
C0000149	SUMMER INDIA TEXTILE MILLS (P) LTD.	3	1250	UDUMALPET	587
C0000149	SUMMER INDIA TEXTILE MILLS (P) LTD.	4	1250	UDUMALPET	585
C0000150	K.S.R.EXPORTS	1	500	UDUMALPET	372
C0000151	VISNUKUMAR TRADERS PVT LTD	1	500	KARUNKULAM	879
C0000151	VISNUKUMAR TRADERS PVT LTD	2	500	KARUNKULAM	1273
C0000152	SUNRISE KNITTING MILLS	1	500	LEVENJIPURAM	621
C0000152	SUNRISE KNITTING MILLS	2	500	RADHAPURAM	1232
C0000152	SUNRISE KNITTING MILLS	3	500	RADHAPURAM	1233
C0000153	DHARANI WIND ENERGY PVT.LTD	1	500	RADHAPURAM	1287
C0000153	DHARANI WIND ENERGY PVT.LTD	2	500	RADHAPURAM	1288



C0000153	DHARANI WIND ENERGY PVT.LTD	3	500	RADHAPURAM	1289
C0000153	DHARANI WIND ENERGY PVT.LTD	4	500	RADHAPURAM	1290
C0000153	DHARANI WIND ENERGY PVT.LTD	5	500	RADHAPURAM	1291
C0000154	J.V.TAPES	1	225	MUPPANTHAL	420
C0000154	J.V.TAPES	2	1250	MUPPANTHAL	589
C0000155	A.R.SUBRAMANIAM	1	600	THANDAYAR KULAM	813
C0000156	S.CHANDRAKUMAR	1	600	DHANAKARKULAM	962
C0000157	CHOLA SPINNING MILLS (P) LTD	1	500	LEVENJIPURAM	596
C0000157	CHOLA SPINNING MILLS (P) LTD	2	500	LEVENJIPURAM	661
C0000157	CHOLA SPINNING MILLS (P) LTD	3	750	LEVENJIPURAM	234
C0000157	CHOLA SPINNING MILLS (P) LTD	4	750	LEVENJIPURAM	238
C0000157	CHOLA SPINNING MILLS (P) LTD	5	500	LEVENJIPURAM	239
C0000158	N.PARVATHI TEXTILES	1	600	DHANAKARKULAM	1093
C0000159	T.N.NANTAGOPAL & SONS	1	600	RADHAPURAM	961
C0000160	KARUR FINANCE PVT LTD	1	750	AYAKUDI	1201
C0000161	ATLAS EXPORT ENTERPRISES	1	750	KONGALNAGARAM	459
C0000161	ATLAS EXPORT ENTERPRISES	2	750	LEVENJIPURAM	1159
C0000161	ATLAS EXPORT ENTERPRISES	3	850	CHETTYKULAM	1309
C0000162	J&J BUYING SERVICES PVT LTD.	1	750	KONGALNAGARAM	618
C0000163	K.T.SPINNING MILLS (P) LTD	1	750	AYAKUDI	1084
C0000164	MIDHUNAM SPINNERS (P).LTD	1	750	TENKASI	1143
C0000165	ARUNACHALA GOUNDER TEXTILEMILLS (P)	1	500	KEELVEERANAM VILLAGE	952
C0000165	ARUNACHALA GOUNDER TEXTILEMILLS (P)	2	500	KEELVEERANAM VILLAGE	1225
C0000165	ARUNACHALA GOUNDER TEXTILEMILLS (P)	3	500	KEELVEERANAM VILLAGE	1225
C0000165	ARUNACHALA GOUNDER TEXTILEMILLS (P)	4	500	KEELVEERANAM VILLAGE	1225
C0000166	P.K.P.N.SPINNING MILLS (P) LTD	2	500	LEVENJIPURAM	437
C0000166	P.K.P.N.SPINNING MILLS (P)	3	500	RADHAPURAM	466



	LTD				
C0000166	P.K.P.N.SPINNING MILLS (P)	4	500	RADHAPURAM	1241
	LTD				
C0000167	V.N.C ELECTRODES	1	225	PANAGUDI	622
C0000168	O.P.T.INTERNATIONAL	1	225	NARANAPURAM	847
C0000169	V.N.C.STEELCDISTRIBUTORS	1	500	PANAGUDI	672
C0000170	PALLIPALAYAM SPINNERS (P) LTD	1	500	KARUNKULAM	436
C0000170	PALLIPALAYAM SPINNERS (P) LTD	2	500	KARUNKULAM	896
C0000170	PALLIPALAYAM SPINNERS (P) LTD	3	750	KARUNKULAM	1308
C0000170	PALLIPALAYAM SPINNERS (P) LTD	4	750	KARUNKULAM	sn122
C0000170	PALLIPALAYAM SPINNERS (P) LTD	5	750	KARUNKULAM	sn123
C0000171	V.K.S.M.COTTON MILLS (P) LTD	1	750	TENKASI	1111
C0000171	V.K.S.M.COTTON MILLS (P) LTD	2	750	TENKASI	1112
C0000172	M/S ANGALAKSHMI SPINNING MILL	1	500	SELAIKARACHEL	364
C0000173	MANOHAR TEXTILE	1	500	PANAGUDI	722
C0000174	SPEEDLINE SPINNERS INDIA (P) LTD	1	750	SURENDAI	1113
C0000175	SHAKTHI MURUGAN TEXTILE	1	500	SELAIKARACHEL	365
C0000176	K.M.D.CLOTHING	1	750	GOMANGALAM	HTSC.NO390
C0000176	K.M.D.CLOTHING	2	350	GOMANGALAM	HTSC.1203
C0000177	OPT YARN STORES	1	225	DHARAPURAM	716
C0000178	SEYAD COTTON MILLS LTD	1	500	LEVENJIPURAM	852
C0000178	SEYAD COTTON MILLS LTD	2	500	LEVENJIPURAM	1088
C0000179	SIVARATHISH SPINNING MILLS PVT.LTD	1	250	NARANAPURAM	610
C0000179	SIVARATHISH SPINNING MILLS PVT.LTD	2	250	NARANAPURAM	611
C0000179	SIVARATHISH SPINNING MILLS PVT.LTD	3	250	NARANAPURAM	612
C0000180	MOON SPINNERS (P) LTD	1	500	PARIVARI SURIYAN	928
C0000180	MOON SPINNERS (P) LTD	2	500	PANAGUDI	sn124
C0000181	MUTHU EXPORT HOUSE	1	225	MUNDUVELANPATTY	380
C0000182	PREM TEXTILES INTERNATIONAL	1	750	LEVENJIPURAM	767
C0000182	PREM TEXTILES	2	750	LEVENJIPURAM	840



	INTERNATIONAL				
C0000182	PREM TEXTILES	3	750	AYAKUDI	1200
	INTERNATIONAL				
C0000183	SRI JAYA JOTHI & CO LTD	1	750	PANAGUDI	457
C0000183	SRI JAYA JOTHI & CO LTD	2	750	PANAGUDI	457
C0000183	SRI JAYA JOTHI & CO LTD	3	750	PANAGUDI	457
C0000183	SRI JAYA JOTHI & CO LTD	4	750	PANAGUDI	457
C0000183	SRI JAYA JOTHI & CO LTD	5	750	PANAGUDI	457
C0000183	SRI JAYA JOTHI & CO LTD	6	750	PANAGUDI	458
C0000183	SRI JAYA JOTHI & CO LTD	7	750	PANAGUDI	458
C0000183	SRI JAYA JOTHI & CO LTD	8	750	PANAGUDI	458
C0000183	SRI JAYA JOTHI & CO LTD	9	750	PANAGUDI	458
C0000183	SRI JAYA JOTHI & CO LTD	10	750	PANAGUDI	458
C0000183	SRI JAYA JOTHI & CO LTD	11	750	AYAKUDI	687
C0000183	SRI JAYA JOTHI & CO LTD	12	750	PANAGUDI	457
C0000183	SRI JAYA JOTHI & CO LTD	13	750	AYAKUDI	685
C0000183	SRI JAYA JOTHI & CO LTD	14	750	AYAKUDI	685
C0000183	SRI JAYA JOTHI & CO LTD	15	750	AYAKUDI	685
C0000183	SRI JAYA JOTHI & CO LTD	16	750	AYAKUDI	685
C0000183	SRI JAYA JOTHI & CO LTD	17	750	AYAKUDI	686
C0000183	SRI JAYA JOTHI & CO LTD	18	750	PANAGUDI	459
C0000183	SRI JAYA JOTHI & CO LTD	19	750	AYAKUDI	688
C0000183	SRI JAYA JOTHI & CO LTD	20	750	AYAKUDI	689
C0000184	C.N.V TEXTILES (P) LTD	1	500	SELAIKARACHEL	367
C0000184	C.N.V TEXTILES (P) LTD	2	225	METRATHI	633
C0000184	C.N.V TEXTILES (P) LTD	3	225	METRATHI	634
C0000184	C.N.V TEXTILES (P) LTD	4	225	PONNAPURAM	636
C0000184	C.N.V TEXTILES (P) LTD	5	225	PONNAPURAM	646
C0000184	C.N.V TEXTILES (P) LTD	6	225	PONNAPURAM	462
C0000185	VELLINGIRI ANDAVAR	1	500	SINJUVADI	489
	TEXTILES (P)LTD				
C0000185	VELLINGIRI ANDAVAR	2	500	VARAPATTI	397
	TEXTILES (P)LTD				
C0000186	SIVASUBRAMANIA	1	500	SINJUVADI	488
	TEXTILES				
C0000186	SIVASUBRAMANIA	2	500	SELAIKARACHEL	366
G0000106	TEXTILES	-			422
C0000186	SIVASUBRAMANIA	3	500	VARAPATTI	422
C0000197		4	500		422
C0000186	SIVASUBKAMANIA TEVTILES	4	500	VAKAPATII	423
C0000197	I LA HLES I A V A NTLII TEVTII ES	1	500	DOOL ANIVINED	571
0000107	PRODUCTS -UNIT II	1	500		5/1



C0000187	JAYANTHI TEXTILES PRODUCTS -UNIT II	2	500	POOLANKINER	381
C0000188	SARMANGAL SYNTHETICS LIMITED	1	800	CHINNA PUTHUR	700 UEDC
C0000188	SARMANGAL SYNTHETICS LIMITED	2	800	CHINNA PUTHUR	700 UEDC
C0000188	SARMANGAL SYNTHETICS LIMITED	3	225	PAZHAVOOR	562 TEDC
C0000189	VISHNU FABRICS	1	750	KONGALNAGARAM	770 OF UEC
C0000190	K.S.R. TEXTILE MILLS PRIVATE LTD	1	500	METRATHI	HTSC 352
C0000191	SRI NAVAMANI TEXTILES (P) LTD	1	225	THUNGAVI	588
C0000193	SRI DHANALAKSHMISIZING&SPI NNINGMILL	1	225	MUPPANTHAL	223
C0000193	SRI DHANALAKSHMISIZING&SPI NNINGMILL	2	225	MUPPANTHAL	822
C0000193	SRI DHANALAKSHMISIZING&SPI NNINGMILL	3	225	MUPPANTHAL	822
C0000193	SRI DHANALAKSHMISIZING&SPI NNINGMILL	4	225	PAZHAVOOR	820
C0000193	SRI DHANALAKSHMISIZING&SPI NNINGMILL	5	225	PAZHAVOOR	820
C0000193	SRI DHANALAKSHMISIZING&SPI NNINGMILL	6	225	PAZHAVOOR	821
C0000193	SRI DHANALAKSHMISIZING&SPI NNINGMILL	7	225	PAZHAVOOR	821
C0000193	SRI DHANALAKSHMISIZING&SPI NNINGMILL	8	225	PAZHAVOOR	235
C0000193	SRI DHANALAKSHMISIZING&SPI NNINGMILL	9	225	MUPPANTHAL	235
C0000193	SRI DHANALAKSHMISIZING&SPI NNINGMILL	10	225	MUPPANTHAL	1087
C0000193	SRI DHANALAKSHMISIZING&SPI NNINGMILL	11	225	MUPPANTHAL	236


**CDM – Executive Board** 

C0000194	ICMC CORPORATION LTD.,	1	600	PANAGUDI	sn125
C0000195	SREE KAILAI SIVASAKTHI SPINNER	1	225	MUNDUVELAM	510
C0000195	SREE KAILAI SIVASAKTHI SPINNER	2	225	MUNDUVELAM	660
C0000195	SREE KAILAI SIVASAKTHI SPINNER	3	750	AYEN SURANDAI	1114
C0000196	SRIGANAPATHYMURUGANS PINNINGMILLS(P)	1	500	PANAGUDI	670
C0000196	SRIGANAPATHYMURUGANS PINNINGMILLS(P)	2	500	PANAGUDI	1048
C0000197	AVE MARIA SPINNING MILLS (P) LTD.,	1	500	PONNAPURAM	371
C0000198	INTEX	1	225	METRATHI	375
C0000198	INTEX	2	225	METRATHI	376
C0000199	CIBI EXPORTS	1	1250	IRRUKANDURAI	555
C0000200	SUGANESWARA SPINNING MILLS (P) MILL	1	750	AYAKUDI	1099
C0000200	SUGANESWARA SPINNING MILLS (P) MILL	2	750	AYAKUDI	1100
C0000201	P. MUTHUSWAMY MUDALIAR & CI.	1	225	METRATHI	374
C0000202	SRI KARPAGAM MILLS INDIA (P) LTD.,	1	500	UDAYATHUR VILLAGE	1294
C0000202	SRI KARPAGAM MILLS INDIA (P) LTD.,	2	500	UDAYATHUR VILLAGE	1292
C0000203	K.A.S. TANNING CO. LTD.,	1	850	CHETTYKULAM	1300
C0000203	K.A.S. TANNING CO. LTD.,	2	250	CHELLAKARICHALL VILLAGE	402
C0000204	K.A.S. EXPORTS	1	850	CHETTYKULAM	1250
C0000204	K.A.S. EXPORTS	2	250	CHELLAKARICHALL VILLAGE	403
C0000205	SRI ARUNOTHAYA TEXTILVES	1	225	PONNAPURAM	706
C0000206	ARULJOTHI EXPORTS PVT. LTD.,	1	225	PONNAPURAM	705
C0000206	ARULJOTHI EXPORTS PVT. LTD.,	2	225	PONNAPURAM	705
C0000207	ARUN KUMAR SPINNING MILLS PVT. LTD.	1	225	PONNAPURAM	838
C0000207	ARUN KUMAR SPINNING MILLS PVT. LTD.	2	225	PONNAPURAM	895
C0000207	ARUN KUMAR SPINNING MILLS PVT. LTD.	3	225	PONNAPURAM	895
C0000207	ARUN KUMAR SPINNING	4	225	PONNAPURAM	895



	MILLS PVT. LTD.				
C0000207	ARUN KUMAR SPINNING	5	225	PONNAPURAM	895
	MILLS PVT. LTD.				
C0000207	ARUN KUMAR SPINNING	6	225	PONNAPURAM	895
	MILLS PVT. LTD.				
C0000208	B.R.T. SPINNERS LTD.,	1	750	PUDUPALAYAM,	399
<b>2</b> 0000 <b>0</b> 00				UDUMALPET	101
C0000208	B.R.T. SPINNERS LTD.,	2	750	PUDUPALAYAM,	401
C0000208		2	750		(17
C0000208	D.R. I. SPINNERS LID.,	3	730	IDUMALATAM,	017
C0000209	SRI VIGNESH VARNS PVT	1	750	C MALAYANDI	295
C0000207	LTD	1	750	PATTINAM	275
C0000209	SRI VIGNESH YARNS PVT.	2	750	C.MALAYANDI	295
00000207	LTD.,	_	100	PATTINAM	270
C0000209	SRI VIGNESH YARNS PVT.	3	750	KANGAYAMPALAYA	527
	LTD.,			M, DHARAPURAM	
				TALUK	
C0000209	SRI VIGNESH YARNS PVT.	4	750	KANGAYAMPALAYA	527
	LTD.,			M, DHARAPURAM	
				TALUK	
C0000209	SRI VIGNESH YARNS PVT.	5	750	KANGAYAMPALAYA	661
	LTD.,			M, DHARAPURAM	
C000054A	MELLAL A & COMDANIX	1	500		1007
C000054A	MEHALA & COMPANY	1	500		1227
C000054A	MEHALA & COMPANY	2	500		1228
C000054A	MEHALA & COMPANY	3	500 225		1229
C000081A	JAYAWARMA KNII IERS	1	1250		419
C000081A	JAYAWARMA KNII IERS	2	1250		594
C000081A	JAYAWARMA KNII IEKS	3	/50		1145
C000102A	ROGINI GRAMEN IS	1	500	PONNAPURAM	460
C000102A	KOGINI GRAMEN IS	2	500		460
C000103D	L.G.B. TEXTLE LTD.,	1	500		1258
C000103D	L.G.B. TEXTILE LTD.,	2	500 225		1259
C000111A	M/S BEST INTERNATIONAL	1	225	PAZHAVOOR	553
C000111A	M/S BEST INTERNATIONAL	2	225	PAZHAVOOR	553
C000111A	M/S BEST INTERNATIONAL	3	225	PAZHAVOOR	553
C000111A	M/S BEST INTERNATIONAL	4	225	PAZHAVOOR	553
C000111A	M/S BEST INTERNATIONAL	5	225	PAZHAVOOR	553
C000111A	M/S BEST INTERNATIONAL	6	225	PAZHAVOOR	553
C000111A	M/S BEST INTERNATIONAL	7	225	PAZHAVOOR	553
C000111A	M/S BEST INTERNATIONAL	8	225	PAZHAVOOR	553
C000111A	M/S BEST INTERNATIONAL	9	225	PAZHAVOOR	553
C000111A	M/S BEST INTERNATIONAL	10	225	PAZHAVOOR	553

**CDM – Executive Board** 

C000111A	M/S BEST INTERNATIONAL	11	225	PAZHAVOOR	553
C000111A	M/S BEST INTERNATIONAL	12	225	PAZHAVOOR	553
C000111A	M/S BEST INTERNATIONAL	13	225	PAZHAVOOR	553
C000111A	M/S BEST INTERNATIONAL	14	225	PAZHAVOOR	553
C000111A	M/S BEST INTERNATIONAL	15	225	PAZHAVOOR	553
C000111A	M/S BEST INTERNATIONAL	16	225	PAZHAVOOR	553
C000111A	M/S BEST INTERNATIONAL	17	225	PAZHAVOOR	553
C000111A	M/S BEST INTERNATIONAL	18	225	PAZHAVOOR	553
C000111A	M/S BEST INTERNATIONAL	19	225	PAZHAVOOR	553
C000111A	M/S BEST INTERNATIONAL	20	225	PAZHAVOOR	553
C000111A	M/S BEST INTERNATIONAL	21	225	PAZHAVOOR	553
C000111A	M/S BEST INTERNATIONAL	22	225	PAZHAVOOR	553
C000111A	M/S BEST INTERNATIONAL	23	225	PAZHAVOOR	553
C000111A	M/S BEST INTERNATIONAL	24	225	PAZHAVOOR	553
C000111A	M/S BEST INTERNATIONAL	25	225	PAZHAVOOR	553
C000111A	M/S BEST INTERNATIONAL	26	225	PAZHAVOOR	553
C000111A	M/S BEST INTERNATIONAL	27	225	PAZHAVOOR	1253
C000111A	M/S BEST INTERNATIONAL	28	225	PAZHAVOOR	1253
C000111A	M/S BEST INTERNATIONAL	29	225	PAZHAVOOR	1253
C000111A	M/S BEST INTERNATIONAL	30	225	PAZHAVOOR	1253
C000111A	M/S BEST INTERNATIONAL	31	225	PAZHAVOOR	1253
C000111A	M/S BEST INTERNATIONAL	32	225	PAZHAVOOR	1253
C000111A	M/S BEST INTERNATIONAL	33	225	KARUNKULAM	1253
C000111A	M/S BEST INTERNATIONAL	34	225	KARUNKULAM	1253
C000111A	M/S BEST INTERNATIONAL	35	225	KARUNKULAM	1253
C000111A	M/S BEST INTERNATIONAL	36	225	KARUNKULAM	1253
C000111A	M/S BEST INTERNATIONAL	37	225	KARUNKULAM	1253
C000111A	M/S BEST INTERNATIONAL	38	225	KARUNKULAM	1253
C000111A	M/S BEST INTERNATIONAL	39	225	KARUNKULAM	1253
C000111A	M/S BEST INTERNATIONAL	40	225	KARUNKULAM	1253
C000111A	M/S BEST INTERNATIONAL	41	225	PONNAPURAM	247
C000111A	M/S BEST INTERNATIONAL	42	225	PONNAPURAM	247
C000111A	M/S BEST INTERNATIONAL	43	225	PONNAPURAM	247
C000111A	M/S BEST INTERNATIONAL	44	225	PONNAPURAM	247
C000111B	RRD TEX PVT LTD.,	1	1250	SANKANERI	1322
C000111B	RRD TEX PVT LTD.,	2	1250	SANKANERI	1321
C000111B	RRD TEX PVT LTD.,	3	1250	SANKANERI	1340
C000111B	RRD TEX PVT LTD.,	4	1250	SANKANERI	13211345
C000118A	SAMBANDAM SPINNING MILLS LTD	1	750	PANAGUDI	470
C000118A	SAMBANDAM SPINNING MILLS LTD	2	750	PANAGUDI	471
C000118A	SAMBANDAM SPINNING	3	500	PAZHAVOOR	497



**CDM – Executive Board** 

	MILLS LTD				
C000118A	SAMBANDAM SPINNING MILLS LTD	4	500	PAZHAVOOR	498
C000118A	SAMBANDAM SPINNING MILLS LTD	5	600	PAZHAVOOR	501
C000118A	SAMBANDAM SPINNING MILLS LTD	6	600	PAZHAVOOR	513
C000118A	SAMBANDAM SPINNING MILLS LTD	7	600	PAZHAVOOR	528
C000118A	SAMBANDAM SPINNING MILLS LTD	8	600	PAZHAVOOR	530
C000118A	SAMBANDAM SPINNING MILLS LTD	9	600	PAZHAVOOR	537
C000118A	SAMBANDAM SPINNING MILLS LTD	10	600	PAZHAVOOR	557
C000182A	BRITISH WEAVING COMPANY	1	750	LEVENJIPURAM	1207
C000191A	SRI NAVAMANI WIND FORMS	1	225	PONNAPURAM	836