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Ref. No: ED II/Comm 45737

Date: 27<sup>th</sup> December 2007

To  
The Secretary,  
Maharashtra Electricity Regulatory Commission,  
13<sup>th</sup> Floor, World Trade Centre,  
Cuffe Parade, MUMBAI-400 005

Sub: Revised Proposal for re-determination of additional cost as reliability charge for mitigating load shedding in Pune

1. MERC order dated 16<sup>th</sup> May 2006 approving Reliability Charge
2. MSEDCL's Petition for additional recovery of charges ref.no. SE/TRC/44/38577 dated 20<sup>th</sup> October 2007
3. Technical Validation Session on the above subject at MERC on 7<sup>th</sup> November 2007
4. MSEDCL letter to CII, Pune ref no ED-II/CII Pune/41515 dated 21<sup>st</sup> November 2007
5. MSEDCL letter to MERC ref no ED-II/CII Pune/41516 dated 21<sup>st</sup> November 2007
6. MERC letter no.MERC/MON/DIS/14/2516 dated 3<sup>rd</sup> December 2007
7. MSEDCL letter to MERC ref no. ED-II/CII Pune/42766 dated 4<sup>th</sup> Dec 2007

Respected Sir,

At the outset we apologise for quoting old provisions of Companies Act 1913 in the petition filed on 20<sup>th</sup> October 2007. The updated details are as under:

MAHARASHTRA STATE ELECTRICITY DISTRIBUTION COMPANY LIMITED (MSEDCL) is a company formed under the Government of Maharashtra General Resolution No.ELA-1003/P.K.8588/Bhag-2/Urja-5 dated January 24, 2005 with effect from 6<sup>th</sup> June 2005

according to the provisions envisaged in the Electricity Act 2003. The MSEDCL has been registered with the Registrar of Companies, Mumbai on 31st May 2005 bearing certificate U40109 MH 2005 PLC 153645 under the Companies Act, 1956.

With reference to the technical validation session (TVS) held on 7<sup>th</sup> November 2007, we are submitting herewith our revised proposal for re-determination of Reliability Charge with revised data of consumption, load pattern, CII generation and cost of CII generation for Pune Urban Circle.

MSEDCL submits that the reconciliation issue and the revised proposal for Pune consumers be de-linked. Further as per TVS the revised reconciliation of Reliability Charge for the period from May 2006 to July 2007 is submitted vide letter ED II/Comm 45736. The reconciliation for the balance period from August 2007 to the month prior to the revised proposal is made effective and will be submitted to Hon'ble Commission for truing up.

## REVISED PROPOSAL

### 1.0 Legal Framework

1.1 MSEDCL is submitting the revised proposal for re-determination of Reliability Charge. The legal background supporting to the revised proposal is given as under:

#### 1.1.1 National Tariff Policy

The petition is backed by the provisions of National Tariff Policy and the relevant clause 8.2.1. is extracted as under:

"All power purchase costs need to be considered legitimate unless it is established that the merit order principle has been violated or power has been purchased at unreasonable rates. The reduction of Aggregate Technical & Commercial (ATC) losses needs to be brought about but not by denying revenues required for power purchase for 24 hours supply and necessary and reasonable O&M and investment for system upgradation. Consumers, particularly those who are ready to pay a tariff which reflects efficient costs have the right to get uninterrupted 24 hours supply of quality power. Actual level of retail sales should be grossed up by normative level of T&D losses as indicated in MYT trajectory for allowing power purchase cost subject to justifiable power purchase mix variation (for example, more energy may be purchased from thermal generation in the event of poor rainfall) and fuel surcharge adjustment as per regulations of the SERC."

### 1.1.2 Reliability Charge and ASC

MSEDCL submits that Pune model is already approved by the Commission and Pune consumers are also subjected to ASC in addition to reliability charge, the same principle is adopted for revised proposal.

The rationale for applying ASC also on consumers covered under the proposed scheme is that the ASC pertains to recovery of Costly Power purchase which is undertaken continuously on a regular basis and not necessarily only during particular hours or days. Since the power sourcing and consumption cannot be traced exactly, all the consumers should be considered to be consuming some portion of the costly power during the day. Therefore in principle ASC should be levied on all the consumers irrespective of whether they are covered under any special scheme for continuous power supply or not. The reliability charge is levied for power sourced and supplied over and above the regular power that is being supplied, which also consists of costly power purchase. In other words, ASC payment is made for bringing load shedding hours down from say 24 hours to 16 hours per week. Whereas reliability charge is paid for providing additional power to maintain the same load shedding hours in case of further shortfall and rise in load shedding hours from 24 to 30 hours per week. Therefore in MSEDCL's considered opinion ASC and Reliability Charge should both become leviable on consumers covered under the proposed scheme.

The Hon'ble Commission in the clarification order dated 7th February 2007 on review petition filed by MSEDCL on Tariff Order for FY 2006-07 has clarified the levy of ASC and Reliability charges in point 7, page 11. In such case, MERC has ruled that ASC is leviable on consumers irrespective of whether they are consuming during peak hour or not. A similar approach needs to be adopted in this case as well.

### 1.1.3 Electricity Act 2003 provisions

MSEDCL submits that the petition should be considered under Section 62(3), Section 62 (4), Section 86 (1) (b) and section 94 (2) of the Electricity Act 2003 as detailed below:

Section 62(3) states that "The Appropriate Commission shall not, while determining the tariff under this Act, show undue preference to any consumer of electricity but may differentiate according to the consumer's load factor, power factor, voltage, total consumption of electricity during any specified period or the

time at which the supply is required or the geographical position of any area, the nature of supply and the purpose for which the supply is required.”

The particular sections provide sufficient room for consideration of revised proposal and determine Reliability Charge by differentiating and using various factors. There is no undue preference to any consumer as the recovery is intended from the same set of consumers who will be benefited from the reduced load shedding and who are willing to pay the additional charges.

It is submitted here that the case under consideration is special in nature and considering that the proposal is going to benefit a particular mass of consumers, it merits a separate “Tariff Dispensation” from other consumers in the same category.

Section 62(4) stipulates “No tariff or part of any tariff may ordinarily be amended more frequently than once in any financial year, except in respect of any changes expressly permitted under the terms of any fuel surcharge formula as may be specified.”

MSEDCL acknowledges that the change in tariff or levy of additional charge is governed by section 62 of the Electricity Act and it may not be possible to effect any change in the same more than once a year. However MSEDCL would like to humbly submit that the revised proposal for Pune Consumers is not an “ordinary” proposal within the normal business operations of MSEDCL and hence warrants a special treatment and speedy dispensation from the Commissions.

MSEDCL submits that fuel surcharge is for variation in fuel cost i.e. variation in power purchase cost for distribution company. Similarly Hon’ble Commission has introduced the concept of costly power and the variation is permitted through Incremental ASC (currently variation in ASC). MSEDCL submits that if there was no ASC all the variation would have been in FAC. Hence considering the same concept of FAC, the variation of additional power purchase as Reliability Charge is not a revision in tariff or part of tariff.

Section 86 (1) - “The State Commission shall discharge the following functions, namely: --

(b) regulate electricity purchase and procurement process of distribution licensees including the price at which electricity shall be procured from the generating

companies or licensees or from other sources through agreements for purchase of power for distribution and supply within the State;”

Section 94(2) states that “The Appropriate Commission shall have the powers to pass such interim order in any proceeding, hearing or matter before the Appropriate Commission, as that Commission may consider appropriate.”

## 2.0 Approach & Methodology

### 2.1 Truing up calculation – Past

2.1.1 MSEDCL has submitted the truing up of the past data for the period from May 06 to July 2007. The details of the same are summarized in the table below:

| Period           | Total Support required from CPP (MUs) | Actual generation by CPPs (MUs) | Additional Grid Support provided to Pune Consumers after considering losses (MUs) | Amount paid for additional grid support (Rs.crs) | Amount paid to CPPs (Rs.crs) | Additional cost to support Pune model (Rs.crs) | Amount recovered by Reliability Charge (Rs. cr) | Amount recovered from Additional sales | Under/(over) recovery from Pune Consumers (Rs. crs) |
|------------------|---------------------------------------|---------------------------------|---|--|------------------------------|--|---|--|---|
| a                | b                                     | c                               | d   | e  | f                            | g=e+f  | h   | i                                      | j=g-h-i   |
| May06 to July 07 | 365.39                                | 82.57                           | 310.61  | 202.52   | 51.61                        | 254.13   | 161.14  | 104.38                                 | -11.39  |

2.1.2 The above table shows that there is an excess recovery of Rs. 11.39 crores. A separate letter has been addressed to the MERC for dealing with this reconciliation and treatment of this excess. Hence, for the purpose of the revised proposal, this amount has not been considered and a new proposal has been submitted to the Honb'le Commission.

## 2.2 Present Methodology

2.2.1 In the TVS, the Commission had directed MSEDCL to submit the revised proposal based on “Distribution Generation based Distribution franchisee’ model. In this regards, vide our letter dated 21<sup>st</sup> November 2007, CII were requested to offer their consent to become a franchisee. Their consent has so far not been received. Since such franchisee cannot buy or sell power, MSEDCL will have to make power purchase agreements with the concerned suppliers and as such the franchisee would work as an agent only. It is, therefore, proposed that MSEDCL

itself may arrange for the additional power through separate power purchase agreements exclusively for Pune Circles.

- 2.2.2 MSEDCL proposes to adopt the existing proposal of CII to use the captive power to mitigate load shedding in Pune Urban circles of MSEDCL. For this purpose MSEDCL proposes to continue to levy the Reliability Charge on the same set of consumers as approved in the Reliability Charge order dated 16th May 2006. ie on Consumers other than domestic consumers consuming less than 300 units.
- 2.2.3 This full scheme is devised to work out on the assumption that the CPP's will give complete support in MW & MU terms so as to completely mitigate the Load shedding quantum of Pune City. However, it has been observed in the past that the power obtained from CPP is not sufficient to mitigate the Load shedding in Pune. In order dated 16th May 2006, the Honb'le Commission had stated that: "Power procurement from Kawas would provide benefit of ' no load shedding ' and therefore Pune consumers must pay for the cost of power" . To enable this, it is proposed to procure power from other sources through bidding route. The options proposed by MSEDCL are:
- 2.2.4 Option 1 – MSEDCL proposes to purchase power from the Pune Captive power plants and the balance requires will be procured exclusively for Pune consumers by a bidding route from traders
- 2.2.5 MSEDCL will opt for the above bidding route only after confirmation from the Pune consumers who are willing to pay the additional charges. MSEDCL assumes that the Consumer groups/Specific regions approaching for further reduction of load shedding are willing to pay the Additional Reliability Charge. MSEDCL on its own will not approach any of the consumer groups/specific regions for supply of such costly power without any proposal from their side.
- 2.2.6 In case consumers are willing to go with CPP power only during peak season, and seek support for an additional grid support from MSEDCL at an additional reliability charges; MSEDCL will procure the power through competitive bidding process or purchase from identified source by Pune Consumers. In such cases MSEDCL will have to contract the power well in advance so that power is available at competitive rates. The Pune consumers will have to absorb the cost for the power purchase on a first charge basis.
- 2.2.7 In the event of the Pune Captive consumers not being able to supply power as envisaged in this proposal, the deficit power will be procured through additional grid support.
- 2.2.8 Option 2 – MSEDCL proposes to purchase power from the Pune Captive power plants and resort to Load shedding for the remaining power deficit in the Pune Urban circle.

2.2.9 In the event of the Pune Captive consumers not being able to supply power as envisaged in this proposal, MSEDCL will resort to further load shedding for the remaining power deficit.

2.2.10 Rate Adjustment - For the purpose of purchase of power from the Pune captive consumers the following alternatives for determination of the price payable are proposed:

1. Fuel Approved rates plus FAC – MSEDCL proposes to purchase the power from Pune Captive power plants on an approved rate by Commission with provision of adjustment of fuel cost. Hon'ble Commission may determine the FAC for CPPs on a monthly/quarterly basis.
2. Pre-determined Price – Alternatively MSEDCL proposes that Pune Captive power plants may give a fixed price approved by Hon'ble Commission.

### 2.3 Mitigating Load Shedding

2.3.1 As per the present protocols, the sheddable load for Pune Urban is 428 MW. The Division wise average load for Pune is give below:

| Sr. No | Name of Division | Non-sheddable Load  | Sheddable Load            | Total load |
|--------|------------------|---|---------------------------|------------|
|        |                  | Avg. load of express feeder for Industrial /water works/ MIDC | Avg. Load of Urban feeder |            |
| 1      | Shivaji Nagar    | 40  | 47                        | 87         |
| 2      | Kothrud          | 10  | 44                        | 54         |
| 3      | Padmavati(Pune)  | 0   | 53                        | 53         |
|        | TOTAL A          | 50  | 144                       | 194        |
|        |                  |   |                           |            |
| 1      | Bund Garden (Pur | 67  | 61                        | 128        |
| 2      | Nagar Road       | 3   | 60                        | 63         |
| 3      | Pimpri           | 64  | 70                        | 134        |
| 4      | Rasta Peth(Pune) | 3   | 38                        | 41         |
| 5      | Parvati          | 4   | 33                        | 37         |
| 6      | Bhosari          | 163   | 22                        | 185        |
|        | TOTAL B          | 304   | 284                       | 588        |
|        |                  |   |                           |            |
|        | Net Total        | 354   | 428                       | 782        |

2.3.2 Based on a load shedding protocol of 428 MW the shortfall of power without considering any CII support could be ~ 965 MWH/day; based on the average load shedding of 2.25 hours per day as experienced during the period from May

2006 to July 2007. Thus the annual requirement is 350 MUs, of which the CII support is being made available for 70 MW on a 7 hour basis which translates into 150 MUs.

2.3.3 In the case of Option 1, it is proposed that the balance after adjustment of losses, net 200MU will be made available to Pune consumers through competitive bidding.

2.3.4 The existing principles and protocols of load shedding (PPLS) for MSEDCL approved as on 23rd May 2007 is given as below:

| Region | Urban & Industrial Agglomeration | Other regions | Agricultural dominated regions | Anticipated load relief |
|--------|----------------------------------|---------------|--------------------------------|-------------------------|
| Groups | Hours                            | Hours         | Hours                          | MW                      |
| A      | 3.0                              | 5.0           | 10.5                           | 3500-4500               |
| B      | 3.75                             | 5.5           | 11.0                           |                         |
| C      | 4.5                              | 6.0           | 11.5                           |                         |
| D      | 5.25                             | 6.5           | 12                             |                         |

2.3.5 The part load shedding of 200 MUs, in case of Option 2 will be governed by the load shedding as governed by the principles and protocols of load shedding.

2.3.6 The PPLS existing after the issue of the reliability order dated 16th May 2006 are provided in Annexure 1.

2.3.7 As can be seen from the data provided the demand was increased and the PPLS were required to be revised. The anticipated load shedding MWH/ day as approved by Hon'ble Commission in the order dated 16th May 2006 was on a lower side than experienced.

### 3.0 Working of Reliability Charges

#### 3.1 CPP costs

3.1.1 CII during the meeting held on 24.11.07 has informed of captive power being available of 70 MW for 7 Hrs per day which translates to ~12.25 MU per month or ~150MU on an annual basis. Being a captive power plant it is assumed that there will be ~ 60 days of non-generation in a year.

3.1.2 The rates considered for evaluation for CII captives is assumed to be same as per order dated 2nd March 2006 in the matter of "CII Proposal to use Captive Power to mitigate load shedding in Pune Urban Circles of MSEDCL". As the detailed plant wise, fuel wise and slot wise generation has not been received

from CII, it is assumed that, of the total generation from CPP; 85% would be from HSD based CPP and balance 15% from LDO based CPP as per the order dated 16<sup>th</sup> May 2006 of the Hon'ble Commission.

3.1.3 The peak hour variable tariff applicable to the industrial units will be reduced from the cost of CPP power to arrive at the net amount payable to CPP. The peak hour variable tariff consists of the base variable tariff and existing FAC. The tariff of Rs. 4.20 /kWh is taken on an average basis as the CPP comprises of both continuous and non-continuous industries. The FAC of Rs. 0.24 as applicable on August 2007 has been considered. For the purpose of rate calculation, the ASC applicable to HT tariff is not considered. The additional cost to Pune consumers is given in the table below:

| Total Support available from CPP (MUs) | Support from HSD based CPP(85%) | Support from LDO based CPP (15%) | Rates of HSD approved by MERC | Rates of LDO approved by MERC | Power purchase cost (Rs. Cr.) | Variable rate for peak hours plus existing FAC (Rs. per unit) | Net recoverable from CPP consumers at variable rate (Rs. Cr) | Net payable to CPP after considering variable rate (Rs. Cr) |
|--|---------------------------------|----------------------------------|-------------------------------|-------------------------------|-------------------------------|---|--|---|
| a                                      | $b=0.85*a$                      | $c=.15*a$                        | d                             | e                             | $f=(b*d)+(c*e)$               | g   | $h=g*a$  | $i=f-h$   |
| 150                                    | 127                             | 22                               | 11.04                         | 8.24                          | 159.24                        | 4.44  | 66.57  | 92.66   |

3.1.4 The purchases from the CPP will not be sufficient to mitigate load shedding in the Pune Urban Circle. Hence, as discussed in Option 1, it is proposed to procure power from other sources through bidding.

### 3.2 Power procurement costs

3.2.1 The load shedding protocol has envisaged a load deficit of 428MW in Pune city which translates to ~350mu. Of this, the power available from CII would be ~150MU, which leaves power procurement from other sources requirement of 200MU. For the purpose of calculations, the power procurement costs are taken at Rs. 8 per unit. This cost for 245 MU works out to Rs. 196.35 crs.

3.2.2 The additional sale of power to Pune consumers is considered to realise at a variable rate of 4.19 which would reduce the net amount payable for power procurement. The distribution losses are assumed at 12% to arrive at net sales and the average rate for billing is considered @Rs.4.63 per unit for LT and Rs.3.83 per unit for HT categories as given in the table below:

| Particulars        | Period - June 06- July 07 - 14 months |         |         |         |
|--------------------|---------------------------------------|---------|---------|---------|
|                    | Unit                                  | LT      | HT      | Total   |
| Net Sales          | MUs                                   | 2120.29 | 2575.37 | 4695.66 |
| Total revenue      | Rs. Cr.                               | 1232.69 | 1427.71 | 2660.40 |
| Fixed charges      | Rs. Cr.                               | 93.53   | 254.98  | 348.52  |
| ED                 | Rs. Cr.                               | 105.14  | 74.06   | 179.20  |
| TOS                | Rs. Cr.                               | 2.20    | 0.00    | 2.20    |
| Reliability Charge | Rs. Cr.                               | 50.10   | 111.04  | 161.14  |
| Variable charges * | Rs. Cr.                               | 981.72  | 987.63  | 1969.35 |
|                    |                                       |         |         |         |
| Variable Rate      | Rs./ Unit                             | 4.63    | 3.83    | 4.19    |

3.2.3 The total cost payable for additional grid support is given in the table below:

| Cost for additional grid support                                       |              |        |
|--|--------------|--------|
| Additional Grid Support provided after considering CPP support         | Mus          | 224    |
| Add Transmission losses  | Mus          | 21     |
| Additional Grid Support provided after considering Transmission losses | Mus          | 245    |
| Rate of power purchase   | Rs.per unit  | 8.00   |
| Total Power Purchase costs (A)   | Rs. Cr       | 196.35 |
| Net Additional sale to Pune consumers considering Disribn. Losses      | Mus          | 200.00 |
| Average variable Billing rate considered                               | Rs. per unit | 4.19   |
| Revenue from additional sales (B)                                      | Rs.Cr        | 83.80  |
| Net Cost for power procurement   | (A)-(B)      | 112.55 |

### 3.3 Reliability Charges

- 3.3.1 MSEDCL proposes to continue to levy the Reliability Charge on the same set of consumers as approved in the Reliability Charge order dated 16th May 2006. ie on Consumers other than domestic consumers consuming less than 300 units.
- 3.4 In the past period of June 06 to July 07, the total sales were 4695 MU and the reliability charge recovered was Rs. 161.14 crores. The consumer having consumption of 0-300units were 860 MU. The actual consumption in Rasthapeth and Ganeshkhind circles of Pune Urban area is 2727 MUs for the period from April 07 to October 07. This proportionately works out to 4675MU for the entire year. Assuming the consumption of consumers in the category of 0-300 as 860 MUs, the consumption of Pune Urban consumers excluding consumers upto 300 units works out to 3815MUs. It is assumed that any additional growth in load shall be taken care by more grid support from various generations that are coming in the near future.

| Calculation of Reliability Charge  |             |        |
|--|-------------|--------|
| Cost of CPP power  | Rs.Cr       | 92.66  |
| Cost of additional grid support  | Rs.Cr       | 112.55 |
| Total Cost   | Rs.Cr       | 205.21 |
| Consumption of Pune Urban consumers excluding domestic consumers upto 300 units          | MU          | 3815   |
| Reliability charges for Pune Urban consumers excluding domestic consumers upto 300 units | Rs.per unit | 0.54   |

### 4.0 Issues related to power purchase from CPPs

#### 4.1 Factors affecting financial position of MSEDCL:

4.1.1 CII shall ensure that MSEDCL is in the same financial position as it was before submission of the proposal. The factors that affect the financial position are:

- Fuel reimbursement for generation done by CPP's during the specified hours.
- Cross Subsidy due to diversion of units.
- Technical loss across the L.T. distribution network.
- Collection Efficiency of the existing MSEDCL system.

4.1.2 MSEDCL request the commission to determine the norms of CPP generation cost so that it would facilitate tapping of surplus power from CPPs for the whole of State.

#### 4.2 Other factors for consideration

4.2.1 The calculations for the reliability charges are based on certain assumptions made on account of the power to be generated by the captive consumers. The main objective of this proposal is to harness the excess captive capacity and mitigate load shedding in Pune Urban Circle. In the past, it has been observed that the CPP have not been able to generate the quantum as undertaken by them. Thus, it is proposed that the Commission should provide for penalising the CPP for non generation, such that the basic objective of this scheme is not deviated from.

4.2.2 MSEDCL shall be compensated for such additional costs including costs of financing, in case MSEDCL finances the expenditure through borrowings. The compensation may be allowed as a pass through to all the consumers/Specific area consumers as the case may be under FAC (due to ceiling on FAC) as the liquidity position is very critical.

4.2.3 By implementing this proposal MSEDCL will have to generate sufficient revenues from units available for distribution across the network. The revenues earned by the circles have to pay the differential cost of generation to the CPP's and also take care of any cross subsidy (including Technical losses & collection inefficiency) components. The tariff increase has to consider all the factors above.

4.2.4 The proposal will be successful only if MSEDCL retains the same financial position before and after acceptance of the CII proposal. Any additional revenues to be mobilized by MSEDCL for implementing the CII proposal would be done by undertaking tariff hike to all the consumers of two Pune Urban circles.

5.0 Final proposal

- 5.1 MSEDCL proposes to recover the additional charges from all the consumers excluding domestic consumers consuming less than 300 units
- 5.2 MSEDCL submits that the scheme be implemented for a period of one year
- 5.3 MSEDCL requests to approve the realistic scenario or as the Hon'ble Commission may deem fit
- 5.4 MSEDCL proposes for a detailed reconciliation of all costs and recovery on a quarterly basis
- 5.5 MSEDCL requests to allow for any under/(over) recovery on such reconciliation to be adjusted in subsequent months in the Reliability Charge itself.

The Hon'ble Commission may consider the above proposal for a favourable dispensation.

Thanking you,

Yours faithfully,

Executive Director-II (Dist & Comm)  
MSEDCL

Copy s.w.r.t

Managing Director(MSEDCL)

Director(Operations)

Director (Finance)

Annexure 1: Earlier PPLS

PPLS – 21<sup>st</sup> January 2006 & 1<sup>st</sup> December 2006

| Region | Urban & Industrial Agglomeration | Other regions | Agricultural dominated regions |
|--------|----------------------------------|---------------|--------------------------------|
| Groups | Hours                            | Hours         | Hours                          |
| A      | 2.5                              | 4.5           | 11                             |
| B      | 3                                | 5             | 11.5                           |
| C      | 3.5                              | 5.5           | 12                             |
| D      | 4                                | 6             | 12                             |

PPLS – 7<sup>th</sup> February 2007

| Region | Urban & Industrial Agglomeration | Other regions | Agricultural dominated regions |
|--------|----------------------------------|---------------|--------------------------------|
| Groups | Hours                            | Hours         | Hours                          |
| A      | 3.5                              | 6.5           | 13                             |
| B      | 4                                | 7             | 13.5                           |
| C      | 4.5                              | 7.5           | 14                             |
| D      | 5                                | 8             | 14                             |

PPLS – 5<sup>th</sup> March 2007

| Region | Urban & Industrial Agglomeration | Other regions | Agricultural dominated regions |
|--------|----------------------------------|---------------|--------------------------------|
| Groups | Hours                            | Hours         | Hours                          |
| A      | 4                                | 6             | 13                             |
| B      | 4.5                              | 6.5           | 13.5                           |
| C      | 5                                | 7             | 14                             |
| D      | 5.5                              | 7.5           | 14                             |

PPLS – 7<sup>th</sup> April 2007

| Region | Urban & Industrial Agglomeration | Other regions | Agricultural dominated regions |
|--------|----------------------------------|---------------|--------------------------------|
| Groups | Hours                            | Hours         | Hours                          |
| A      | 4.5                              | 6.75          | 14                             |
| B      | 5                                | 7.25          | 14.5                           |
| C      | 5.5                              | 7.75          | 15                             |
| D      | 6                                | 8.25          | 15                             |

PPLS – 26<sup>th</sup> April 2007

| Region | Urban & Industrial Agglomeration | Other regions | Agricultural dominated regions |
|--------|----------------------------------|---------------|--------------------------------|
| Groups | Hours                            | Hours         | Hours                          |
| A      | 4.5                              | 6.5           | 14                             |
| B      | 5                                | 7             | 14.5                           |
| C      | 5.5                              | 7.5           | 15                             |
| D      | 6                                | 8             | 15                             |