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PUBLIC NOTICE

Sub: Staff paper on “Measures for restraining the prices of electricity in short-term sale/trading”.

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Concerns have been expressed by a number of stakeholders regarding the increase in prices of electricity being sold/ traded in short-term. To facilitate discussion on various possible options and the various issues involved, the staff of the Commission has prepared a paper titled “Measures for restraining the prices of electricity in short-term sale/trading”.

2. Comments of the stakeholders are invited on the Staff Paper latest by 22.9.2008.

3. It may be noted that Staff Paper does not necessarily represent the views of the Commission. The Commission would take a view on various issues after receiving the suggestions of the stakeholders.

Sd/-

(ALOK KUMAR)
Secretary

Staff Paper

MEASURES FOR RESTRAINING THE PRICES OF
ELECTRICITY IN SHORT-TERM SALE/TRADING



September , 2008

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MEASURES FOR RESTRAINING THE PRICES OF ELECTRICITY IN SHORT-TERM SALE /TRADING

1.0 **Objective:**

The objective of this Paper is to provide background and set up an informed and holistic debate on what should be done to restrain the prices of electricity in short term trading.

1.1 **Background**

Bulk electric power supply in India is mainly tied in long-term contracts. The bulk suppliers are mostly the central or state owned generating stations, as also a few IPPs. Previously the bulk buyers were generally the SEBs, which are in the process of being unbundled. The power allocations from various generating stations are being assigned to Discoms as part of the unbundling process mandated by the Electricity Act, 2003. The Appropriate Commission regulates the price of bulk supply of a generating station to distribution utilities on the basis of its Terms and Conditions of Tariff or as per the PPA. Thus, most of the existing bulk supply is locked up in long terms contracts having station-wise tariff, usually in two-parts viz., capacity charge and energy charge.

2.0 Section 62 gives powers to the Regulatory Commission for regulating tariffs. The norms of tariff and efficiency of inter-State generating stations have been progressively improved by the Commission to have overall economy and to ensure reasonable prices of bulk tariff. The prices of bulk electricity from CERC regulated generating stations have been stable and reasonable. In fact the capacity charge of a station progressively reduces with time. In the terms and conditions of tariff, the cost of fuel (based on normative standard of efficiency) is pass through.

The variable charge of coal/lignite station has remained stable. Recently there has been substantial increase in the cost of electricity generated with liquid fuel such as Naptha, diesel and RLNG.

- 3.0 Apart from regulated tariff, there is provision for tariff discovery under section 63. This process has also been successfully implemented in the country leading to a healthy price discovery for long term PPAs in spite of overall shortage scenario proving the efficacy of competition in price discovery. Tariff policy has mandated procurement through competitive bidding with a 5 years transit period for PSUs. Further, the Commission is entrusted with the mandate for development of electricity market as per the section 66 of the Act and in accordance with the National Electricity Policy. The Commission is also responsible for regulating inter-State transmission and ensuring that various transmission licenses provide open access as per the various provisions of the Act.
- 4.0 The SEBs/Discoms who have the obligation to provide electricity to their consumers mainly rely on supplies from these long-term contracts. However, it is neither feasible nor economical to meet short term, seasonal or peaking demand through long-term contracts. Be it a deficit scenario or otherwise, power trading is essential for meeting the short terms demand at an optimum cost. Similarly, power trading is essential for distribution utilities for selling short-term surpluses in order to optimize the cost of procurement. A few captive generating plants, cogeneration plants and merchant plants, States having 12 % free hydro power also participate in trading. The Open Access Regulations and inter-State Trading Regulations and of the setting up of a Power Exchange have facilitated power trading. Today, it is possible to trade electricity between any two points in India through inter-State Open Access on advance reservation basis, on current reservation basis, on day ahead basis and even on real time basis. Power Exchange has provided a platform for

day-ahead trading on a collective basis in an organized manner through competitive bidding simultaneously by buyers as well as sellers.

5.0 All inter-State supply agreements are implemented through day-ahead dispatch and drawal schedules as per IEGC. Real time deviations from the schedules (over-drawal, under-drawal, over-generation and under-generation) are financially settled through UI mechanism. The settlement rate is a function of the grid frequency in a given time block. The financial settlement of deviations from schedules is done at the following electrical boundaries:

- Regional boundary
- State boundary
- Intra-State boundaries (if organized).

6.0 **Cautious Approach towards market development**

While creating avenues of electricity trading through open access through bilateral agreements or through power exchange, the Commission has adopted a very cautious approach. It has been made clear that no long term PPA with CPSU or IPPs shall be re-opened for the sake of market development.

7.0 **Advantages of short-term trading**

Given that overwhelming majority of supplies continued to be governed under long term PPA at regulated prices, the short term trading through bilateral contracts/PX is basically a fringe market. The advantages of short term trading and for that matter unscheduled interchange of electricity under UI mechanism, are listed below:

- Resources optimization
- Reducing peaking shortage by ensuring transfer of electricity from surplus region to deficit region on day to day, hour to hour and minute to minute basis.
- Providing a very powerful signal for investment in generation. (A lot of IPPs are setting up new generating stations).
- Harnessing of diverse sources of power such as co-generation, captive, wind power etc.
- Providing useful market data about elasticity of demand and peaking shortage, which help in taking investment decisions.

It needs to be highlighted that various options provided for short-term trading are voluntary.

8.0 Price discovery in short term market takes place as follows:

- The prices in bilateral trades are determined by the parties mutually through negotiations.
- The prices in the power exchange are discovered through anonymous double sided bids in a transparent manner without any human interface.

Short-term trading scenario

9.0 Serious concerns have been expressed over the rising prices of short term traded power along with the suggestions that there is a need for intervention by the Government or by the Regulators. For example, in Haryana, average purchase price of short term power has increased from Rs.2.57 per unit in the year 2004-05 to Rs.6.55 per unit in the year 2007-08. This has placed serious burden on power purchase costs in a number of States. For example, it is estimated that Punjab would spend

30 % of power purchase costs on 13% energy in short-term in year 2008-09.

10.0 Weighted average sale price of traded power in the country has also shown a rising trend in recent times:

Period	Weighted Average Sale Price (Rs./kWh)
April – June, 2006	4.08
July – September, 2006	4.45
October – December, 2006	4.84
January – March, 2007	4.69
April – June, 2007	4.64
July – September, 2007	3.37
October – December, 2007	4.52
January – March, 2008	5.61
April – June, 2008	7.24

11.0 The typical power production costs (cost plus tariff) per kWh with different fuels are given below:

- | | | | | |
|----|-----------------------------|---|----------|--|
| 1. | Domestic coal (pit head) | - | Rs.1.9 | -Vindhyachal STPS |
| 2. | Domestic coal (load centre) | - | Rs.2.94 | -Badarpur TPS |
| 3. | Imported coal | - | Rs.3.50 | estimated at current Imported coal price |
| 4. | Hydro | - | Rs.4.72 | -Tehri HEP |
| | | - | Rs.2.44 | -Indirasagar HEP |
| | | - | Rs.1.79 | -Dhuliganga HEP |
| 5. | LNG | - | Rs.9.00 | -Kawas GPS |
| 6. | Naptha | - | Rs.15.00 | -Kawas GPS |
| 7. | HSD | - | Rs.8.00 | -Dadri GPS |

It may be mentioned that except Dadri, these costs are of relatively new plants.

- 12.0 The average power purchase costs of some of the States (some of them also sell) have been compiled on the basis of tariff orders of SERCs and is given below:

Purchase Prices of DISCOMS/ State trading companies		
	2007-08	2008-09
UP		235
NDPL		260
PSEB	254	
MP		213
Gujarat	231	
GRIDCO		135

- 13.0 The share of major selling entities in short term traded power in the year 2007-08 is given below:

HP Govt.	12.00%	Free power from hydro
JSWP	6.9%	Domestic coal
MP PTCL	5.61%	Mostly hydro
KSEB	4.9%	Hydro power
WBSEDCL	4.09%	Mostly domestic coal
TNEB	3.56%	mix of hydro and thermal
GRIDCO	3.29%	mix of thermal and hydro

It can be seen that most of the traded power is sourced from coal/hydro power plants, of which power production cost (tariff at cost plus norms) is not more than Rs 4 per unit in all most all the cases. As against this, the prices discovered in Power exchange (which can not be much different from the bilateral traded power) have been in the range of Rs.0.90 to Rs 9 per unit(Annexure-I). But the price in most of the time blocks have been in the range of Rs. 6 to 8 per unit. Even in the case of bilaterally traded electricity in year 2007-08, 33% of the electricity was

traded at the price higher than Rs.6. The position is shown in the table given below:

Sale price and volume of electricity traded by the trading licensees		
2007-08		
Sale Price (Rs)	Volume Traded (MUs)	% to Total Volume
0.00 – 2.00	4729.61	27.30
2.00 – 4.00	2647.71	15.28
4.00 – 6.00	4094.05	23.63
6.00 – 8.00	5292.53	30.55
8.00 – 10.00	556.92	3.21
10.00 – 12.00	4.55	0.03
	17325.37	100.00

14.0 Therefore, one can not escape the conclusion that most of the traded power which is costing less than Rs. 4 per unit is being sold in the price range of Rs 6 to Rs 8.5 per unit. The deficit States perceive it as a profiteering by the surplus states. The surplus States perceive it as an exercise in cost optimisation which helps them to wipe off their accumulated losses and avoid tariff hikes. But this ploughing back of trading profits to ARR of distribution utilities falsifies , to large extent, the premise that market driven prices are helping accelerate capacity addition by incentivising generators.

15.0 As per the data compiled by Central Electricity Authority, following is the power supply position in the country:

Power Supply Position (Energy)		
Region	April-June, 2008	April-June, 2007
	Energy Shortage (MU) %	Energy Shortage (MU) %
Northern	-10.0	-6.6
Western	-16.2	-16.1
Southern	-4.0	-3.6
Eastern	-5.8	-3.2
North-Eastern	-14.7	-14.5

All India	-10.1	-8.7
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Power Supply Position (Peak)		
Region	April-June, 2008	April-June, 2007
	Peak Shortage (MW) %	Peak Shortage (MW) %
Northern	-9.4	-8.1
Western	-25.7	-26.5
Southern	-6.0	-5.8
Eastern	-5.7	-2.5
North-Eastern	-23.0	-24.1
All India	-14.6	-13.5

16.0 Regulatory perspective

16.1 The apparent reasons being given for rising trend in the sale price of short-term traded electricity are increasing shortages of electricity, increase in maximum rate under UI and increasing fuel costs. The factual position of weighted average sale price of traded power and the maximum UI rate in the corresponding period are given below:

Price of traded power and UI rate		
	Weighted Average Sale price (Rs/kwh)	Maximum UI Rate (Rs)
April-June, 06	4.08	5.70
July-Sept, 06	4.45	5.70
Oct-Dec, 06	4.84	5.70
Jan-Mar, 07	4.69	5.70
April-June, 07	4.64	7.45
July-Sept, 07	3.37	7.45
Oct-Dec, 07	4.52	7.45
Jan-Mar, 08	5.61	10.00
April-June, 08	7.24	10.00

16.2 Further, the monthly average UI rate of the grid is also recently showing a rising trend (Annexure-II). However, it needs to be mentioned that the present UI ceiling rate of Rs.10/- per unit is below the cost of liquid fuel generation (Rs.12-15) and therefore available liquid fuel capacity is not being fully scheduled due to the absence of appropriate commercial signal.

- 16.3 As regards the increase in the fuel costs, there has not been such a significant hike in the price of domestic coal or cost of hydro power so as to justify the increase being seen in the cost of short-term traded power. The share of fuels which have seen increase in the cost recently such as LNG, Naphtha, Diesel is very small in the short-term traded power. The current prices of imported coal also do not justify the rise in the cost of traded power.
- 16.4 It is felt that one of the more plausible reasons for increase in the sale of price of electricity in short-term is profiteering by the sellers in period of increasing shortages. This has also enhanced the perverse incentive for distribution utilities to cut down the supply to their own consumers and make money in short-term market. On the other hand, the increasing budget of short-term power purchase costs of a number of States is leading to financial difficulties for the purchasing distribution utilities and resulting in pressure to increase consumer tariffs in such States.
- 16.5 It has also been represented that the availability of supply in the short-term market has reduced because of flexibility of revising the schedules provided in the Open Access Regulation, 2004 has not been provided in the new Regulations, 2008. As a result the unrequisioned surplus of NTPC liquid fuel station cannot be scheduled even when there are buyers ready to pay. The inflexibility in schedules is also causing hardship to captive and cogeneration plants since they cannot afford to bear the risk of paying heavy UI charges in case forced outage of their plants.
- 16.6 It needs to be examined what could be possibly done to remedy the situation through regulatory intervention. Though there is a counter argument that the slow progress on the part of the States in adding generation capacity in time for meeting the expected demand is one of the

main reasons for the situation, the same can not be an excuse to permit profiteering by anybody in shortages

- 16.7 Proviso of Section 62(1)(a) of the Act provides for such regulatory intervention. CERC has jurisdiction in case of inter-State sales. The proviso is reproduced below:

“Provided that the Appropriate Commission may, in case of shortage of supply of electricity, fix the minimum and maximum ceiling of tariff for sale or purchase of electricity in pursuance of an agreement, entered into between a generating company and a licensee or between licensees, for a period not exceeding one year to ensure reasonable prices of electricity.”

The intention of the legal provision is that the appropriate Electricity Regulatory Commission (CERC in case of inter-state sales) may go for regulatory intervention in terms of a cap on tariff for sale of electricity in pursuance of agreement for a period not exceeding one year with the sole objective of ensuring reasonable prices of electricity. Though it is often argued that the quantum of traded power as compared to the total generation of electricity in the country is still minuscule (the volume of electricity being traded in short-term bilaterally, through power exchange and through unscheduled interchange mechanism is in the range of 7-8% of the total electricity generation in the country), it needs to be realized that the legal provision aims at ensuring reasonable prices of electricity being traded in short-term and not the average price of the total electricity generated in the country.

- 16.8 Any ceiling of tariff has to be determined in such a way that there is adequate incentive for the investors to continue to invest in new generation plants by earning reasonable returns after taking into account

current fuel costs. Further, the short-term power purchase prices will be higher than the long-term power purchase prices because of inherent uncertainty in returns. In addition, there has to be an adequate signal for appropriate pricing of electricity traded in peak hours.

16.9 When the power is cut, DG sets are switched on in homes, offices, factories, hospitals and commercial complexes. Going by the replacement cost of electricity which a consumer has to spend in case of non-availability of power, the ceiling price cap should be the cost of diesel generation. It is a different matter that inspite of scarcity of electricity the distribution utilities of States are not fully harnessing intra-state and inter-State sources of costly generation based on liquid fuels (diesel, naphtha, HFO etc). However, a cap at the replacement cost level would not be effective in preventing profiteering by Surplus Discoms and owners of free hydro power portfolios.

16.10 Whether it is gas, crude or coal, the spot price of a commodity tends to be higher than the prices in long term forward contracts. It cannot be the intention to bring short term prices of electricity at par with long term prices or to undermine time value of electricity or to dampen the investment signal or even to deny the opportunity cost to the entity which has saved its prudent management of its supply portfolio electricity (through better management of its water resources, reduction in ATC losses, improving the performance of its own generating station, etc.). The objective of the price caps should be to prevent profiteering at the cost of ultimate consumers of deficit States.

16.11 Apart from practical difficulties, individual price cap for portfolio owners like Discoms and State Governments owning free hydro power could become highly controversial. It is felt that a uniform price cap would be a more feasible to implement. Price cap should take into account the time of the

day value and differential between short-term and long term trade. As of today, there are a few merchant plants in the short-term market. While designing a price cap for merchant capacity one has to take into account that they may not be able to get schedules round the clock and round the year. Therefore, it would be erroneous to fix their price cap corresponding to NTPC or UMPP which have assured recovery of capacity charges for 25 years. In view of the above and for the sake of uniformity, a uniform price cap for portfolio owners and coal/lignite thermal plants could be considered. Coal based captive plants could also be brought under the same cap. In so far as RLNG, Diesel, HFO, Naptha based plants are concerned, they should be allowed to sell above the capped price and there should be no need of separate cap for them. As far cogeneration and renewables are concerned, they need to be encouraged through preferential tariff. There should be no price cap for cogeneration, wind, small hydro, solar, bio gas etc.

16.12 PX is a main institution of an organized electricity market. A voluntary PX in India became operative a few months ago. PX in India has been conceived as an instrument of attracting investment and attracting new supplies to the short-term market. Ideally, in a PX all the sellers should bid around their marginal cost. At a uniform clearing price the last supplier recovers only the short-term marginal cost, whereas others recover increasingly more amount which could be less, equal or greater than their capacity charge. It needs to be pointed out that exchanges operated by PJM or Nardpool do not drive investment and are suited for markets with stable demand. Capacity market (assuring full recovery of capacity charges irrespective of scheduling) had to be created in the PJM market to encourage investments in new capacity. We have designed a PX with the intent of encouraging new investment. Therefore, tight regulation of PX, particularly when it's volume is just a trickle, could be counter productive. The proposition of technology wise caps and individual caps for each

portfolio owner participating in the PX at this stage may not be desirable. However, it would not be feasible to keep PX outside any caps on bilateral trading. Nevertheless, in the long run when PX volumes grow and it takes sizable chunk of the short-term trade, it would be desirable to monitor and ensure that prices in PX are discovered based on marginal cost bidding.

16.13 In view of the above, the following ceiling in tariff for sale of power in short term for inter-State transaction are proposed for discussion:

- i) The sale price for short-term sale (less than one year) by distribution licensee or an intra state trading licensees responsible for managing its bulk power purchase/sale of the State Discom/State Government (either directly or through inter-State trading licensee) to the distribution licensee of another State or intra state trading licensee of another State should not exceed Rs 5 per kWh.
- ii) The same ceiling of Rs 5 per kWh would also apply to the short-term sale by IPP/MPP/ CPP (directly or through inter-State trader) to distribution licensee/intra-state trading licensee of another State responsible for managing bulk power purchase for the State Discom/State Government and if the power generated is from hydro electric/domestic coal/imported coal/lignite/blended coal.
- iii) The proposed ceiling of tariff would be Rs 6/- per unit if the short-term sale is during 1800 hours to 2200 hours of the day.
- iv) These ceiling of tariff would also apply to sale bids in power exchanges by the entities mentioned at (i) and (ii) above.

16.14 In case the ceilings are imposed, the trading margin on inter-state trading may be withdrawn. Even otherwise the ceiling on trading margin has not been effective in containing short-term prices. On the other hand, it has

throttled the contribution of trades in providing new trading products and bringing more supplies to the market.

17.0 There are no short cut solution it seems. It appears that improving supply side position is the only durable solution. Time lag in new capacity addition, road blocks in developing the hydro-sector, problems in the allotment of sites for UMPPs by some of the extremely deficit states intra-State open access barriers etc., need to be addressed urgently. Before contemplating price caps for the sake of providing short-term relief, One needs to ponder whether systemic problems can be resolved through stop-gap measures. At the same time, ignoring profiteering would go against the legislative mandate of protecting the consumers interests.

17.0 **Conclusion:**

I Remove supply side constraints

- a) Allow revision of schedules for bilateral transactions for inter-State open access, so that unrequisioned surplus of NTPC liquid fuel capacity could be scheduled and captive cogeneration, small hydro and other IPPs can participate in short-term trade without fear of incurring heavy UI liability in case of forced outage.
- b) Make open access for small producers, including renewables user friendly and cost effective, with SLDCs acting in on impartial manner.

II Create accountability for not scheduling ISGS shares and creating shortage by overdrawing from the grid

RLDC should be directed to report all instances of overdrawal by a State beyond 5 % during low frequency while not fully requisitioning its ISGS Share. It should be viewed as grid indiscipline and processed for penal action.

III Price caps:

- a) Contemplating price caps is a sensitive matter which needs to be deliberated extensively with the stake holders before arriving at a decision.
- b) Uniform price cap of Rs.5/- per unit and Rs.6/- (1800-2200 hrs) per unit have been proposed for discussion for inter-State short-term sale.
- c) Price caps have been proposed below the replacement cost of electricity.
- d) The price cap for inter-State sale have been proposed for all Distribution Utilities or State trading outfits managing the power portfolio of distribution utilities of a State.
- e) Price caps have also suggested for coal/lignite/hydro based IPP/MPP/ CPP and for State Governments owning free hydro power.

IV. Implications of price cap:

a) **Sellers may avoid price-cap:**

The distribution utilities may be tempted to avoid bilateral trading or sale through power exchange and prefer to sell power under UI

mechanism through withdrawal. This would defeat the purpose of price ceiling. Increased unscheduled flows could pose problem of grid security.

b) **Impact on PX:**

The price discovery mechanism of power exchanges is likely to become defunct in many hour blocks and power exchanges would be required to resort to pro-rata rationing of available power. This could send mixed signals about development of power market in India.

c) **Impact on liquidity:**

The availability of short term power for purchase on scheduled basis may get reduced further increasing the hardship of deficit States.

d) **Impact on demand:**

The demand being elastic is bound to be more at capped price of Rs.5/- compared to the demand in Rs.5-Rs.8 range. The supply at a capped price of Rs.5/- may be 3-4 times the demand at times. Consequently, the sellers in the bilateral market may resort to discriminatory methods in selecting buyers.

e) **Impact on short-term traded prices:**

Appropriately designed price caps, if successfully implemented would address the concerns about profiteering in shortages and

also the feeling of hardship in deficit States. Market reforms cannot completely ignore the present day realities.

Summary of Transactions on IEX

Delivery day	Total Purchase Bids received (MU) MUs	Total Sale Bids received (MU) MUs	Actual Market Clearing Volume (MCV) MUs	Market Clearing Price (MCP)	
				Minimum MCP (Rs/KWh)	Maximum MCP (Rs/KWh)
28-Jun-08	10.20	3.02	0.06	6.47	8.09
29-Jun-08	16.35	4.53	0.23	6.85	6.85
30-Jun-08	0.60	0.78	0.14	7.80	7.80
1-Jul-08	15.10	1.62	0.22	7.21	7.24
2-Jul-08	22.15	2.11	1.02	7.90	7.92
3-Jul-08	25.83	2.15	1.53	7.51	7.52
4-Jul-08	24.05	4.10	0.07	6.70	6.70
5-Jul-08	22.16	2.56	1.50	7.10	7.10
6-Jul-08	23.56	10.25	1.03	6.70	6.76
7-Jul-08	20.31	2.67	1.57	7.20	7.30
8-Jul-08	23.51	6.02	3.71	6.75	7.30
9-Jul-08	24.75	6.03	3.85	7.40	7.67
10-Jul-08	26.85	7.13	4.89	6.75	7.50
11-Jul-08	27.53	5.84	3.92	7.00	7.75
12-Jul-08	30.80	1.94	1.12	7.60	8.00
13-Jul-08	28.45	5.75	5.00	7.60	8.10
14-Jul-08	32.06	6.43	5.83	7.60	8.20
15-Jul-08	30.01	8.53	7.38	7.60	8.20
16-Jul-08	34.59	6.88	5.87	7.60	8.20
17-Jul-08	38.68	4.81	4.15	7.66	8.30
18-Jul-08	37.03	3.43	3.37	8.05	8.35
19-Jul-08	37.88	3.77	3.75	8.04	8.53
20-Jul-08	32.01	3.37	3.05	7.58	8.50
21-Jul-08	31.11	2.16	1.87	7.63	8.66
22-Jul-08	34.72	0.59	0.57	7.89	8.60
23-Jul-08	35.30	0.49	0.33	8.09	8.57
24-Jul-08	40.40	0.22	0.17	8.09	8.57
26-Jul-08	35.10	0.42	0.20	8.10	8.60
27-Jul-08	31.92	1.04	0.82	8.10	8.50
28-Jul-08	33.07	2.66	2.56	8.07	8.60
29-Jul-08	35.27	3.52	1.21	6.00	8.00
30-Jul-08	35.33	5.90	2.02	5.90	7.90
31-Jul-08	33.01	4.30	2.34	6.12	8.10
1-Aug-08	30.72	0.79	0.50	7.10	8.15
2-Aug-08	27.28	1.72	1.23	7.10	8.50
3-Aug-08	27.16	10.57	6.34	7.49	8.06
4-Aug-08	26.76	4.65	2.70	7.58	8.30
5-Aug-08	29.26	5.95	4.08	7.40	8.30
6-Aug-08	38.67	11.96	10.03	7.11	8.75
7-Aug-08	37.27	15.34	9.51	6.00	8.50
8-Aug-08	35.74	18.08	10.73	5.90	8.50
9-Aug-08	43.35	22.91	18.61	5.66	8.60
10-Aug-08	11.50	18.93	6.33	0.92	8.25
11-Aug-08	30.20	11.43	4.56	2.48	8.72
12-Aug-08	32.20	8.53	4.00	3.30	8.90
13-Aug-08	36.65	8.78	3.92	7.06	9.00
14-Aug-08	37.55	7.70	7.28	6.69	9.00
15-Aug-08	27.88	20.85	6.63	5.95	8.50

16-Aug-08	34.10	22.26	12.40	5.50	8.69
17-Aug-08	28.10	33.17	3.96	5.50	8.70
18-Aug-08	6.90	32.87	6.50	5.40	8.70
19-Aug-08	30.50	28.37	7.31	4.00	8.70
20-Aug-08	31.60	30.53	3.56	3.50	8.70
Total / Average	1533	440	206	6.68	8.18

Annexure-II

MONTHLY AVERAGE UI RATE OF NEW AND SR GRID FROM JANUARY 2005 TO JUNE 2008

Period	Ceiling UI Rate Ps/Unit
Jan,05 To Apr 07	570
May 07 To Dec 07	745
Jan 08 TO Jun 08	1000

