



MAHARASHTRA STATE ELECTRICITY DISTRIBUTION CO. LTD.

Prakashgad, Plot No.G-9, Bandra (East), Mumbai – 400 051

■ (P) 26474753, (O) 26474211 / 26472131, Fax- 26472366, Website: www.mahadiscom.in

Ref: SE/TRC/Z-20/5879

Date: 25 FEB 2010

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

Subject: Petition for determination of Reliability Charges for withdrawal of Load Shedding in the District Head Quarters. - Addendum to the Petition dated 19th February 2010.

Ref: Office Petition no. SE/TRC/Z-20/5204 dated 18th February 2010.

Respected Sir,

MSEDCL is herewith filing an Addendum to the Petition filed on 18th February 2010 for determination of Reliability Charges for withdrawal of Load Shedding in the District Head Quarters.

It is submitted that the further regulatory process in this regard may please be expedited, so that the proposal can be implemented and the consumers situated under the Divisional Head Quarters can be given relief in Load Shedding.

Thanking you,

Yours faithfully,

-sd-

Executive Director (Commercial)

MSEDCL

Encl: As above.

BEFORE THE MAHARASHTRA ELECTRICITY REGULATORY COMMISSION, MUMBAI

FILING NO.

CASE NO.

IN THE MATTER OF

Addendum Petition for determination of Reliability Charges for withdrawal of Load Shedding in the District Head Quarters

I, Shri. **Abhijit Deshpande**, Aged 44 years, son of **Shri. Jayant Deshpande**, having my office at MSEDCL, Prakashgad, Plot No.G-9, Anant Kanekar Marg, Bandra (E), Mumbai-400051 do solemnly affirm and say as follows:

I am Executive Director (Commercial) of Maharashtra State Electricity Distribution Co. Ltd., the petitioner in the above matter and am duly authorized to make this affidavit.

I say that MSEDCL has submitted a Petition for determination of Reliability Charges for withdrawal of Load shedding in the District Head Quarters and further desires to file addendum to the said Petition as per the attached Petition.

All the other necessary details as specified in the addendum to the petition are based on the information received from the concerned officers of the Company and I believe them to be true.

I say that there are no proceedings pending in any Court of Law / Tribunal or Arbitrator or any other authority, wherein the Petitioners are the Party and where the issues arising and / or relief sought are identical or similar to the issues arising in the matter pending before the Commission.

I solemnly affirm at Mumbai on this 24th February 2010, that the contents of this affidavit are true to my knowledge, no part of it is false and nothing material has been concealed there from.

sd

Executive Director (Commercial)
MSEDCL

Identified before me

Addendum Petition for determination of Reliability Charges for withdrawal of Load Shedding in the District Head Quarters

1. MSEDCL as envisaged in the "roadmap for reduction of load shedding" and as a next step towards the phase – wise reducing / eliminating Load Shedding in the State, has filed a petition dated 18th February 2010, proposing implementation of Zero Load Shedding model for the area covered under District Headquarters, and for approval of Reliability Charges to be recovered thereof and for compensating the expenditure that would be incurred for procurement of power necessary to mitigate Load Shedding (LS) in the Divisional Head Quarters.
2. MSEDCL has planned to implement the plan of reducing / eliminating Load shedding of District Headquarters based on the Group identified as per the Hon'ble Commission order dated 20th June 2008 along with Head Quarter of Revenue Division at Nasik as was proposed in Case no. 31/2009.
3. In the given approach, MSEDCL has proposed to procure additional power through the regular power purchase activity, based on the principles and protocols of load shedding (PPLS) existing at a given point of time, availability of power, seasonal variations etc and will allocate the costly power from its Merit Order Dispatch to the District headquarters, such that the consumers of those regions will have to bear the additional cost only to the extent required for mitigation of load shedding on these areas.
4. MSEDCL has also proposed in the said petition that though the area covered in the Gadchiroli District is included for withdrawal of load shedding in their respective groups i.e. "B", "C" and "D", being a badly affected naxalite area, the additional cost of power allocated to Gadchiroli District would be passed on to other respective beneficiary consumers of DCL group "B", "C" and "D" since the divisions situated in said District belong to either of this group.
5. The Division wise requirement of power is enclosed as ANNEXURE A and the detailed calculation of Group - wise Reliability Charges is enclosed as ANNEXURE B.

Prayer:

On the basis of submissions made in the foregoing paragraphs, MSEDCL hereby respectfully requests the Hon'ble Commission to admit the addendum to the Petition and may be further pleased to treat the addendum as a part of the main petition for grant of relief as prayed for in the main petition.

Deponent
sd
Executive Director (Commercial)
MSEDCL

ANNEXURE A - Divisional wise requirement of power as per Load Shedding Protocol IV

1. For Group A:

Table 1: Power Requirement for Group A Divisional Quarters

Requirement of Power to mitigate Load shedding in District HQ as Per Scenario-IV Circular 29 dt. 31.12.2009

Sr. No.	City	Division	% DCL	Group	Average load of Urban feeder	LS Hours as per Scenario-IV Circular 29		Average load of MIDC/ Industries having one day staggering	LS Hours as per Scenario-IV		Total MWH
					MW	LS Hrs.	MWH	MW	LS Hrs.	MWH	MWH
1	Kolhapur	Kolhapur (U)	13	A	54.93	2.75	151.06	45.93	2.29	104.98	256.04
2	Sangli	Sangli Urban	14								
MW/ Requirement for 24 hrs at Dist. Periphery					MWH Requirement		151			105	256
					MW Requirement		6			4	11
MW requirement at MSETCL Peripheri (Trns. Loss 4.85%)					MWH Requirement		159			110	269
					MW Requirement		7			5	11
					MW requirement for Urban	7	MW for 24 hrs	Mu requirement for Urban		0.16	Mus per day
					MW requirement for stagg.	5	MW for 24 hrs	Mu requirement for Stagg		0.11	Mus per day
					Total MW requirement	11	MW for 24 hrs	Total Mu requirement		0.27	Mus per day

2. For Group B:

Table 2: Power Requirement for Group B Divisional Quarters

Requirement of Power to mitigate Load shedding in District HQ as Per Scenario-IV Circular 29 dt. 31.12.2009

Sr. No.	City	Division	% DCL	Group	Average load of Urban feeder	LS Hours as per Scenario-IV Circular 29		Average load of MIDC/ Industries having one day staggering	LS Hours as per Scenario-IV		Total MWH
					MW	LS Hrs.	MWH	MW	LS Hrs.	MWH	MWH
1	Solapur	Solapur (U)	22	B	170.54	3.50	596.89	27.32	2.29	62.45	659.34
2	Ratnagiri	Ratnagiri	24								
3	Sindhudurg	Kudal	25								
4	Chandrapur	Chandrapur	26								
5	Wardha	Wardha	24								
6	Brahmapuri	Gadhchiroli	28								
MW/ Requirement for 24 hrs at Dist. Periphery					MWH Requirement	597			62	659	
					MW Requirement	25			3	27	
MW requirement at MSETCL Peripheri (Trns. Loss 4.85%)					MWH Requirement	627			66	693	
					MW Requirement	26			3	29	
					MW requirement for Urban	26	MW for 24 hrs		Mu requirement for Urban	0.63	Mus per day
					MW requirement for staqq.	3	MW for 24 hrs		Mu requirement for Stagg	0.07	Mus per day
					Total MW requirement	29	MW for 24 hrs		Total Mu requirement	0.69	Mus per day

3. For Group C:

Table 3: Power Requirement for Group C Divisional Quarters

Requirement of Power to mitigate Load shedding in District HQ as Per Scenario-IV Circular 29 dt. 31.12.2009

Sr. No.	City	Division	% DCL	Group	Average load of Urban feeder	LS Hours as per Scenario-IV Circular 29		Average load of MIDC/ Industries having one day staggering	LS Hours as per Scenario-IV		Total MWH
					MW	LS Hrs.	MWH	MW	LS Hrs.	MWH	MWH
1	Ahmednagar	Ahmednagar (UCR)	26	C	92.77	4.25	394.27	50.11	2.29	114.54	508.81
2	Bhandara	Bhandara	30								
3	Satara	Satara	30								
4	Buldhana	Buldhana	33								
5	Gadchiroli	Gadchiroli	37								
MW/ Requirement for 24 hrs at Dist. Periphery					MWH Requirement		394			115	509
					MW Requirement		16			5	21
MW requirement at MSETCL Peripheri (Trns. Loss 4.85%)					MWH Requirement		414			120	535
					MW Requirement		17			5	22.28
					MW requirement for Urban	17	MW for 24 hrs	Mu requirement for Urban		0.41	Mus per day
					MW requirement for stagg.	5	MW for 24 hrs	Mu requirement for Stagg		0.12	Mus per day
					Total MW requirement	22	MW for 24 hrs	Total Mu requirement		0.53	Mus per day

4. For Group D:

Table 4: Power Requirement for Group D Divisional Quarters

Requirement of Power to mitigate Load shedding in District HQ as Per Scenario-IV Circular 29 dt. 31.12.2009

Sr. No.	City	Division	% DCL	Group	Average load of Urban feeder	LS Hours as per Scenario-IV Circular 29		Average load of MIDC/ Industries having one day staggering	LS Hours as per Scenario-IV		Total MWH
					MW	LS Hrs.	MWH	MW	LS Hrs.	MWH	MWH
1	Latur	Latur	40	D	176.48	5.00	882.40	28.23	2.29	64.53	946.93
2	Akola	Akola (U)	38								
3	Washim	Washim	40								
4	Nanded	Nanded U	42								
5	Yavatmal	Yavatmal	43								
6	Allapalli	Gadhchiroli	38								
MW/ Requirement for 24 hrs at Dist. Periphery					MWH Requirement		882			65	947
					MW Requirement		37			3	39
MW requirement at MSETCL Peripheri (Trns. Loss 4.85%)					MWH Requirement		927			68	995
					MW Requirement		39			3	41.47
					MW requirement for Urban	39	MW for 24 hrs	Mu requirement for Urban		0.93	Mus per day
					MW requirement for stagg.	3	MW for 24 hrs	Mu requirement for Stagg		0.07	Mus per day
					Total MW requirement	41	MW for 24 hrs	Total Mu requirement		1.00	Mus per day

ANNEXURE B – Calculation of Reliability Charges

1. For Group A:

Table 5: Calculation of Reliability Charges for Group A Divisional Quarters

Reliability Charge - GROUP A																
Particulars	Legend	Units	Assum	Apr-10	May-10	Jun-10	Jul-10	Aug-10	Sep-10	Oct-10	Nov-10	Dec-10	Jan-11	Feb-11	Mar-11	Total
				30	31	30	31	31	30	31	30	31	31	28	31	365
MW Requirement at Trans. periphery	a	MW	11.21	11.21	11.21	11.21	11.21	11.21	11.21	11.21	11.21	11.21	11.21	11.21	11.21	
Effective days of Load Shedding	b	%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	
MW Requirement at Trans. periphery considering load shedding	c=a*b	MW		11.21	11.21	11.21	11.21	11.21	11.21	11.21	11.21	11.21	11.21	11.21	11.21	134.55
Hours Requirement	d	Hr	24	24	24	24	24	24	24	24	24	24	24	24	24	
MU's requirement per day at Transmission periphery	e = c*d	MU		0.27	0.27	0.27	0.27	0.27	0.27	0.27	0.27	0.27	0.27	0.27	0.27	3.23
MU's requirement per month at Transmission periphery	f=e*30	MU		8.07	8.34	8.07	8.34	8.34	8.07	8.34	8.07	8.34	8.34	7.53	8.34	98.22
Power Purchase Rate	g	Rs/kwh	4.42	4.42	4.42	4.42	4.42	4.42	4.42	4.42	4.42	4.42	4.42	4.42	4.42	
Cost of Power Purchase	h=f*g	Rs. Crs		3.57	3.69	3.57	3.69	3.69	3.57	3.69	3.57	3.69	3.69	3.33	3.69	43.41
MUs at Dist. Periphery considering 4.85% Transmission Loss	i=f*(1-4.85%)	MU	4.85%	7.68	7.94	7.68	7.94	7.94	7.68	7.94	7.68	7.94	7.94	7.17	7.94	93.45
Distribution Loss of the region in the year 2009	j	%	20.98%	20.98%	20.98%	20.98%	20.98%	20.98%	20.98%	20.98%	20.98%	20.98%	20.98%	20.98%	20.98%	
Mus Available for Sale	k=i*(1-j)	MU		6.07	6.27	6.07	6.27	6.27	6.07	6.27	6.07	6.27	6.27	5.67	6.27	73.85
Average Billing Rate for ZLS area	l	Rs/kwh	4.32	4.32	4.32	4.32	4.32	4.32	4.32	4.32	4.32	4.32	4.32	4.32	4.32	
Revenue from Additional Sale	m=k*l	Rs Crs		2.62	2.71	2.62	2.71	2.71	2.62	2.71	2.62	2.71	2.71	2.45	2.71	31.90
Balance PP cost to be recovered	n=h-m	Rs. Crs		0.95	0.98	0.95	0.98	0.98	0.95	0.98	0.95	0.98	0.98	0.88	0.98	11.51
Average Consumption Considering Growth Rate as above	o	MU	38.26	38.26	38.26	38.26	38.26	38.26	38.26	38.26	38.26	38.26	38.26	38.26	38.26	459.15
Total Consumption including additional sale	s=r+k	MU		44.33	44.53	44.33	44.53	44.53	44.33	44.53	44.33	44.53	44.53	43.93	44.53	533.00
Reliability Charges	t=n/s	Rs/kwh		0.21	0.22	0.21	0.22	0.22	0.21	0.22	0.21	0.22	0.22	0.20	0.22	0.22

2. For Group B

Table 6: Calculation of Reliability Charges for Group B Divisional Quarters

Reliability Charge - GROUP B																
Particulars	Legend	Units	Assum.	Apr-10	May-10	Jun-10	Jul-10	Aug-10	Sep-10	Oct-10	Nov-10	Dec-10	Jan-11	Feb-11	Mar-11	Total
				30	31	30	31	31	30	31	30	31	31	28	31	365
MW Requirement at Trans. periphery	a	MW	28.87	28.87	28.87	28.87	28.87	28.87	28.87	28.87	28.87	28.87	28.87	28.87	28.87	
Effective days of Load Shedding	b	%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	
MW Requirement at Trans. periphery considering load shedding	c=a*b	MW		28.87	28.87	28.87	28.87	28.87	28.87	28.87	28.87	28.87	28.87	28.87	28.87	346.47
Hours Requirement	d	Hr	24	24	24	24	24	24	24	24	24	24	24	24	24	
MU's requirement per day at Transmission periphery	e = c*d	MU		0.69	0.69	0.69	0.69	0.69	0.69	0.69	0.69	0.69	0.69	0.69	0.69	8.32
MU's requirement per month at Transmission periphery	f=e*30	MU		20.79	21.48	20.79	21.48	21.48	20.79	21.48	20.79	21.48	21.48	19.40	21.48	252.92
Power Purchase Rate	g	Rs/kwh	4.42	4.42	4.42	4.42	4.42	4.42	4.42	4.42	4.42	4.42	4.42	4.42	4.42	
Cost of Power Purchase	h=f*g	Rs. Crs		9.19	9.49	9.19	9.49	9.49	9.19	9.49	9.19	9.49	9.49	8.58	9.49	111.79
MUs at Dist. Periphery considering 4.85% Transmission Loss	i=f*(1-4.85%)	MU	4.85%	19.78	20.44	19.78	20.44	20.44	19.78	20.44	19.78	20.44	20.44	18.46	20.44	240.66
Distribution Loss of the region in the year 2009	j	%	20.98%	20.98%	20.98%	20.98%	20.98%	20.98%	20.98%	20.98%	20.98%	20.98%	20.98%	20.98%	20.98%	
Mus Available for Sale	k=i*(1-j)	MU		15.63	16.15	15.63	16.15	16.15	15.63	16.15	15.63	16.15	16.15	14.59	16.15	190.17
Average Billing Rate for ZLS area	l	Rs/kwh	4.32	4.32	4.32	4.32	4.32	4.32	4.32	4.32	4.32	4.32	4.32	4.32	4.32	
Revenue from Additional Sale	m=k*l	Rs Crs		6.75	6.98	6.75	6.98	6.98	6.75	6.98	6.75	6.98	6.98	6.30	6.98	82.15
Balance PP cost to be recovered	n=h-m	Rs. Crs		2.44	2.52	2.44	2.52	2.52	2.44	2.52	2.44	2.52	2.52	2.27	2.52	29.64
Average Consumption Considering Growth Rate as above	o	MU		50.70	50.70	50.70	50.70	50.70	50.70	50.70	50.70	50.70	50.70	50.70	50.70	608.34
Total Consumption including additional sale	s=r+k	MU		66.33	66.85	66.33	66.85	66.85	66.33	66.85	66.33	66.85	66.85	65.28	66.85	798.51
Reliability Charges	t=n/s	Rs/ kwh		0.37	0.38	0.37	0.38	0.38	0.37	0.38	0.37	0.38	0.38	0.35	0.38	0.37

3. For Group C:

Table 7: Calculation of Reliability Charges for Group C Divisional Quarters

Reliability Charge - GROUP C																
Particulars	Legend	Units	Assump	Apr-10	May-10	Jun-10	Jul-10	Aug-10	Sep-10	Oct-10	Nov-10	Dec-10	Jan-11	Feb-11	Mar-11	Total
MW Requirement at Trans. periphery	a	MW		30	31	30	31	31	30	31	30	31	31	28	31	365
Effective days of Load Shedding	b	%	22.26	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	
MW Requirement at Trans. periphery considering load shedding	c=a*b	MW		22.26	22.26	22.26	22.26	22.26	22.26	22.26	22.26	22.26	22.26	22.26	22.26	267.09
Hours Requirement	d	Hr	24	24	24	24	24	24	24	24	24	24	24	24	24	
MU's requirement per day at Transmission periphery	e = c*d	MU		0.53	0.53	0.53	0.53	0.53	0.53	0.53	0.53	0.53	0.53	0.53	0.53	6.41
MU's requirement per month at Transmission periphery	f=e*30	MU		16.03	16.56	16.03	16.56	16.56	16.03	16.56	16.03	16.56	16.56	14.96	16.56	194.98
Power Purchase Rate	g	Rs/kwh	4.42	4.42	4.42	4.42	4.42	4.42	4.42	4.42	4.42	4.42	4.42	4.42	4.42	
Cost of Power Purchase	h=f*g	Rs. Crs		7.08	7.32	7.08	7.32	7.32	7.08	7.32	7.08	7.32	7.32	6.61	7.32	86.18
MUs at Dist. Periphery considering 4.85% Transmission Loss	i=f*(1-4.85%)	MU	4.85%	15.25	15.76	15.25	15.76	15.76	15.25	15.76	15.25	15.76	15.76	14.23	15.76	185.52
Distribution Loss of the region in the year 2009	j	%	20.98%	20.98%	20.98%	20.98%	20.98%	20.98%	20.98%	20.98%	20.98%	20.98%	20.98%	20.98%	20.98%	
Mus Available for Sale	k=i*(1-j)	MU		12.05	12.45	12.05	12.45	12.45	12.05	12.45	12.05	12.45	12.45	11.25	12.45	146.60
Average Billing Rate for ZLS area	l	Rs/kwh	4.32	4.32	4.32	4.32	4.32	4.32	4.32	4.32	4.32	4.32	4.32	4.32	4.32	
Revenue from Additional Sale	m=k*l	Rs Crs		5.21	5.38	5.21	5.38	5.38	5.21	5.38	5.21	5.38	5.38	4.86	5.38	63.33
Balance PP cost to be recovered	n=h-m	Rs. Crs		1.88	1.94	1.88	1.94	1.94	1.88	1.94	1.88	1.94	1.94	1.75	1.94	22.85
Average Consumption Considering Growth Rate as above	o	MU	35.39	35.39	35.39	35.39	35.39	35.39	35.39	35.39	35.39	35.39	35.39	35.39	35.39	424.62
Total Consumption including additional sale	s=r+k	MU		47.43	47.84	47.43	47.84	47.84	47.43	47.84	47.43	47.84	47.84	46.63	47.84	571.22
Reliability Charges	t=n/s	Rs/ kwh		0.40	0.41	0.40	0.41	0.41	0.40	0.41	0.40	0.41	0.41	0.38	0.41	0.40

4. For Group D:

Table 8: Calculation of Reliability Charges for Group D Divisional Quarters

Reliability Charge - GROUP D																
Particulars	Legend	Units	Assum	Apr-10	May-10	Jun-10	Jul-10	Aug-10	Sep-10	Oct-10	Nov-10	Dec-10	Jan-11	Feb-11	Mar-11	Total
				30	31	30	31	31	30	31	30	31	31	28	31	365
MW Requirement at Trans. periphery	a	MW	41.47	41.47	41.47	41.47	41.47	41.47	41.47	41.47	41.47	41.47	41.47	41.47	41.47	
Effective days of Load Shedding	b	%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	
MW Requirement at Trans. periphery considering load shedding	c=a*b	MW		41.47	41.47	41.47	41.47	41.47	41.47	41.47	41.47	41.47	41.47	41.47	41.47	497.60
Hours Requirement	d	Hr	24	24	24	24	24	24	24	24	24	24	24	24	24	
MU's requirment per day at Transmission periphery	e = c*d	MU		1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	11.94
MU's requirment per month at Transmission periphery	f=e*30	MU		29.86	30.85	29.86	30.85	30.85	29.86	30.85	29.86	30.85	30.85	27.87	30.85	363.25
Power Purchase Rate	g	Rs/kwh	4.42	4.42	4.42	4.42	4.42	4.42	4.42	4.42	4.42	4.42	4.42	4.42	4.42	
Cost of Power Purchase	h=f*g	Rs. Crs		13.20	13.64	13.20	13.64	13.64	13.20	13.64	13.20	13.64	13.64	12.32	13.64	160.55
MUs at Dist. Periphery considering 4.85% Transmission Loss	i=f*(1-4.85%)	MU	4.85%	28.41	29.35	28.41	29.35	29.35	28.41	29.35	28.41	29.35	29.35	26.51	29.35	345.63
Distribution Loss of the region in the year 2009	j	%	20.98%	20.98%	20.98%	20.98%	20.98%	20.98%	20.98%	20.98%	20.98%	20.98%	20.98%	20.98%	20.98%	
Mus Available for Sale	k=i*(1-j)	MU		22.45	23.20	22.45	23.20	23.20	22.45	23.20	22.45	23.20	23.20	20.95	23.20	273.12
Average Billing Rate for ZLS area	l	Rs/kwh	4.32	4.32	4.32	4.32	4.32	4.32	4.32	4.32	4.32	4.32	4.32	4.32	4.32	
Revenue from Additional Sale	m=k*l	Rs Crs		9.70	10.02	9.70	10.02	10.02	9.70	10.02	9.70	10.02	10.02	9.05	10.02	117.99
Balance PP cost to be recovered	n=h-m	Rs. Crs		3.50	3.62	3.50	3.62	3.62	3.50	3.62	3.50	3.62	3.62	3.27	3.62	42.57
Average Consumption Considering Growth Rate as above	o	MU	51.61	51.61	51.61	51.61	51.61	51.61	51.61	51.61	51.61	51.61	51.61	51.61	51.61	619.28
Total Consumption including additional sale	s=r+k	MU		74.05	74.80	74.05	74.80	74.80	74.05	74.80	74.05	74.80	74.80	72.56	74.80	892.40
Reliability Charges	t=n/s	Rs/ kwh		0.47	0.48	0.47	0.48	0.48	0.47	0.48	0.47	0.48	0.48	0.45	0.48	0.477