

PUNJAB STATE POWER CORPORATION LIMITED

***REPORT ON OUTCOME OF THE MOCK TRIALS FOR
DESIGN OF TWO PART TARIFF***

JANURAY, 2014

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A1 APPROACH OF TWO PART TARIFF PROPOSAL

BACKGROUND AND CONTEXT

- 1.1. In the tariff order for the year 2009-10, the Hon'ble PSERC had issued a specific directive to the erstwhile PSEB for adoption of two part tariff in the state. In order to ensure compliance with the said directive, the Hon'ble Commission had directed the PSEB to submit a comprehensive proposal for implementation of two part tariff in the state.
- 1.2. The PSPCL had submitted a Proposal for implementation of Two Part Tariffs as part of the ARR filing for FY 2012-13. However, during the public hearing initiated by the Hon'ble Commission, the consumers of PSPCL expressed a number of Objections on the approach and methodology proposed by PSPCL.
- 1.3. Owing to the above objections and also to the difficulty in implementation of the proposal, PSPCL was forced to withdraw the same. Further, in view of the above opposition from the consumers, the Hon'ble Commission had stated in its tariff order for the year 2012-13 as under:

The Commission while mindful of National Tariff Policy enjoining early introduction of Two Part Tariff is nevertheless of the considered view that Two Part Tariff should be introduced only after building a consensus amongst various stakeholders of the utility through public hearings and by critically analyzing the actual billing data to determine the impact on consumers as well as revenue of utility. PSPCL is, therefore, directed to examine the issues raised by the consumers / consumer organizations and submit detailed revised proposal within 3 months of this Order for introduction of Two Part Tariff addressing the concerns of the consumers/consumer organisations.

- 1.4. Subsequently, the PSPCL submitted a simplified proposal for Two Part Tariff for implementation from FY 2013-14. In the public hearing initiated by Hon'ble Commission, a number of divergent views were expressed by various stakeholders. The Hon'ble Commission in the Tariff Order for FY 2013-14 stated as under:

The Commission, while mindful of Tariff Policy enjoining early introduction of Two Part Tariff, is nevertheless, of the considered view that Two Part Tariff should be introduced only after attending concerns of various stakeholders of the utility through public hearings and by critically analyzing the actual billing data, to determine the impact on consumers as well as revenue of utility. PSPCL is, therefore, directed to examine the issues raised by the consumers / consumer organizations, and conduct mock trial/ parallel run of the proposed Two Part Tariff system, at least in five selected Divisions of PSPCL for 6 months, and submit a detailed report along with a more refined proposal for introduction of Two Part Tariff, addressing the concerns of the consumers/ consumer organizations expressed during the processing of ARR for FY 2013-14 and also the observations made by PSPCL during the mock trial/ parallel run..

- 1.5. In compliance with the aforesaid Directive and as per the performas received from the Hon'ble Commission vide *Letter No PSERC/Tariff/T/36/6156* dated 3rd October 2013, the PSPSCL has conducted the mock trials of the proposed two part tariffs.
- 1.6. This Report lays down the approach followed for implementation of Two Part Tariffs, Tariffs used in the mock trials and the outcome of the mock trials.

A2 APPROACH AND METHODOLOGY

- 2.1 In the erstwhile PSEB now PSPCL for all categories of consumers single part tariff has been continuing since 1994. Keeping in view directives of Hon'ble PSERC & provisions of Electricity Act 2003, PSPCL has designed Two part Tariff by splitting existing single part tariff of various categories of consumers on the basis of utilization factor of these categories. The department bears fixed charges for generation of electricity & its distribution like interest, depreciation, operation and maintenance expenses, establishment expenses, & equity which is above 8000 Cr. Per annum. For recovering these fix charges from various categories of consumers the fixed charges recoverable per month comes to Rs.230-240/KW . Recovery of these fixed charges has not been proposed keeping in view paying capacity of various categories of consumers and this very principle has been followed in other states as well. Accordingly PSPCL has proposed fixed charges for various categories of consumers as given in 2 part tariff proposal enclosed. With the levy of these fixed charges, about 30% of total amount of fix charges shall be recovered & the balance automatically gets reflected in the rate of energy charges while designing two part tariff for various categories of consumers.
- 2.2 For implementation of two part tariff the fixed charges has been proposed to be recovered as per sanctioned contract demand in KVA for categories having sanctioned load above 100 KW and on the basis of sanctioned load in KW for consumers with sanctioned load less than 100 KW (without rounding off). The billing shall continue on monthly basis for all categories of consumer except for DS&NRS consumers having sanctioned load <20 KW.
- 2.3 **Impact on Revenue:** While designing two part tariff, the revenue as available from various consumer categories under single part tariff has been taken as the base & overall revenue neutrality of PSPCL has also been kept in view. Revenue from energy charges & MMC has been considered for revenue neutrality of PSPCL while designing two part tariff.
- 2.4 **Impact on Electricity Duty:** In Two Part Tariff, both Fixed & Energy Charges shall comprise SOP & since ED is to be charged on SOP, the ED to be collected would be almost same as in single part Tariff.
- 2.5 Further regulations for implementation of two part tariff have been proposed as under:-
 - a) **Demand Surcharge:** Demand surcharge for exceeding the sanctioned contract demand shall be charged @Rs.750/kVA as currently applicable.

- b) **Cold Stores, Ice Factories and Ice Candies:** These consumers shall be billed on rates as applicable to General Industrial categories.
- c) **Seasonal Industry consumers:** There should be no seasonal category and these shall be considered under General Industrial category.
- d) **Applicability of surcharges:** All surcharges currently levied shall continue to be applicable (unless expressly mentioned in the current proposal) in the proposed two part tariff
- e) **Temporary supply:** Consumers availing temporary supply shall be continued to be billed on currently applicable tariff.
- f) **Surcharge on Continuous Process industry:** Continuous Process industry will be charged 10 paise/unit on pro-rata basis as here-to-fore.
- g) **Non linear load surcharge:** Non linear load surcharge of 10 paise per unit has been proposed to be levied on non-linear load like Railway Traction on account of nature of load encountered in this category. A study is being conducted by PSPCL to identify other non linear loads, where after this surcharge shall be applicable on all such loads.
- h) **High Utilisation Factor Charge:** All consumers (except DS, NRS, Street Lighting and AP/AP High Tech) having monthly utilization factor above 40% shall be levied an additional charge of 10 paise/unit on their consumption beyond 40% utilisation factor. Further additional surcharge of 10 P/Unit shall be levied on their consumption beyond 60% utilization factor.
- i) **PIU/ Arc Furnace Surcharge:** PIU/ Arc Furnace consumers shall be levied PIU/ Arc Furnace surcharge @ 10 paise/unit in addition to other charges.
- j) **Discontinuation of MMC:** Monthly Minimum Charges (MMC) being levied currently shall be discontinued.
- k) **Golden Temple Amritsar & Durgiana Temple Amritsar:** The tariff currently applicable to these consumers is proposed to be continued.
- l) **Agriculture consumers and AP High Tech consumers:** Agriculture pump set consumers and AP High Tech consumers shall be continued to be billed on currently applicable tariff.

A3 ANALYSIS OF PAST CONSUMER DATA:

In order to design the two part tariff and to estimate the monetary impact of two part tariff on different consumers and on PSPCL, billing data of sample consumers from each category has been analyzed, and the existing and proposed tariffs imposed on them to check the revenue neutrality. For undertaking the two part tariff study, the consumer data for six months for different categories of 5 No of selected division of different zones was considered as under:

Category	Particulars
LS - General Industry	Billing data for (Cyl 8) used for the tabulation of results. However the data for cycles 3-8 used for study & the results are comparable.
LS - Power intensive units	Billing data for (Cyl 8) used for the tabulation of results. However the data for cycles 3-8 used for study & the results are comparable.
Railway traction	Billing data from (Cyl 3 to Cyl 8) used for the tabulation of results
Bulk supply	Billing data for (Cyl 8) used for the tabulation of results. However the data for cycles 3-8 used for study & the results are comparable.
DS/NRS Consumer above 100 KW	Billing data for (Cyl 8) used for the tabulation of results. However the data for cycles 3-8 used for study & the results are comparable.
DS/NRS Consumer 20 to 100 KW	Billing data for (Cyl 6) used for the tabulation of results. However the data for cycles 1-6 used for study & the results are comparable.
Public lighting	Billing data for (Cyl 6) used for the tabulation of results
Medium supply	Billing data for (Cyl 6) used for the tabulation of results. However the data for cycles 1-6 used for study & the results are comparable.
Small Power	Billing data for (Cyl 6) used for the tabulation of results. However the data for cycles 1-6 used for study & the results are comparable.
DS/NRS consumer upto 20 KW	Billing data for (Cyl 3) used for the tabulation of results. However the data for cycles 1-3 used for study & the results are comparable.

A4EXAMPLE OF SPLITTING TWO PART TARIFF.

4.1 SMALL POWER INDUSTRIAL CATEGORY:

Existing Single part tariff

(i) Energy Charges = 574 Paisa/Unit

(ii)MMC = 153/kW

1) Sanctioned Load (ending 3/2013) = 907468KW

2) Energy Sales (2012-13) = 837.04 M.U.

3) Utilization Factor = 10.52%

4) Utilization Factor (For two part Tariff)= 12% (keeping in view future growth)

5) Electricity consumption /KW/month with 12% U.F. = 87.6 KWH (1x730x0.12)

6) (i) Fixed charges = Rs. 60/KW/Month

(ii) Reduction of energy charges
due to levy of fixed charges= 68Paisa (60/87.6)

(iii) Energy charges = 506 Paisa/Unit (574-68)

7) Two Part Tariff Proposed:

(i) Fixed Charges = Rs.60/kW/Month

(ii) Energy Charges = 506 paisa/unit

Note: Same method have been followed in respect of other categories of consumer for working out two part tariff.

4.2 UTILIZATION FACTORS CONSIDERED FOR DIFFERENT CATEGORIES:

S No.	Category	Utilization Factor as per data available	U.F used for splitting of Single Part Tariff in Two Part tariff*
	DS (load upto100kW)	10.72	12
	DS (Load above 100 kW)	12.01	14
	NRS (load upto100kW)	8.7	10
	NRS (Load above 100 kW)	11.18	13
	SP	10.52	12
	MS	12.91	15
	RT	21.88	25
	LS (GI)	22.46	25
	LS (PIU)	30.09	33
	BS (LT)	29.79	32
	BS (HT)	21.23	24

***Note:** SAP consumers data is not included in the study & Keeping in view the future growth of the energy consumption, the Utilization Factor used for splitting of Single Part Tariff in Two Part Tariff is taken as slightly on higher side than the actual utilization Factor.

A5THE DESIGNED TWO PART TARIFF FOR VARIOUS CATEGORIES OF CONSUMER AFTER SPLITTING SINGLE PART TARIFF FOR YEAR 2013-14 HAS BEEN PROPOSED AS UNDER:

Domestic Category consumers with connected load less than 20 KW

DS	Two Part Tariff*	Single Part Tariff
0-3 KW	Fixed Charges = Rs.20/KW	MMC = Rs51/KW
3-7 KW	Fixed Charges = Rs20/KW	MMC = Rs51/KW
7-20 KW	Fixed Charges = Rs20/KW	MMC = Rs51/KW
Energy Charges	0-100 = 446 paisa/unit 100-300 = 589 paisa/unit Above 300= 630 paisa/unit	0-100 = 456 paisa/unit 100-300 = 602 paisa/unit Above 300 = 644 paisa/unit

***U.F at which Single Part Tariff Splits into Two Part Tariff is 12%**

Domestic Category consumers with connected load greater than 20 KW but up to 100 KW

DS	Two Part Tariff*	Single Part Tariff
20-100 KW	Fixed Charges= Rs30/KW	MMC = Rs51/KW
Energy Charges	0-100 =446paisa/unit 100-300 = 589paisa/unit Above 300 = 630paisa/unit	0-100 =456paisa/unit 100-300 = 602paisa/unit Above 300 = 644paisa/unit

***U.F at which Single Part Tariff Splits into Two Part Tariff is 12%**

Domestic Category consumerswith connected load above 100 KW

DS	Two Part Tariff*	Single Part Tariff
ABOVE 100 KW	Fixed Charges = Rs30/KVA	MMC =Rs46/ KVA
Energy Charges	0-100 =446paisa/unit 100-300 = 589paisa/unit Above 300 = 630paisa/unit	0-100 =456paisa/unit 100-300 = 602paisa/unit Above 300 = 644paisa/unit

***U.F at which Single Part Tariff Splits into Two Part Tariff is 14%**

NRS Category consumers with connected load less than 20 KW

NRS RATES UP TO 20 KW	Two Part Tariff*	Single Part Tariff
0-3 KW	Fixed Charges = Rs20/KW	MMC = Rs185/KW
3-7 KW	Fixed Charges = Rs30/KW	MMC = Rs185/KW
7-20 KW	Fixed Charges = Rs40/KW	MMC = Rs185/KW
Energy Charges	UP TO 100 = 606 paisa/unit Above 100 = 618 paisa/unit	UP TO 100 = 645 paisa/unit Above 100 = 658 paisa/unit

***U.F at which Single Part Tariff Splits into Two Part Tariff is 10%**

NRS Category consumers with connected load greater than 20 KW but up to 100 KW

NRS	Two Part Tariff*	Single Part Tariff
20 -100 KW	Fixed Charges = Rs55/KW	MMC = 185/ KW
Energy Charges	UP TO 100 = 606paisa/unit Above 100 = 618paisa/unit	UP TO 100 = 645paisa/unit Above 100 = 658paisa/unit

***U.F at which Single Part Tariff Splits into Two Part Tariff is 10%**

NRS Category consumers with connected load between 100 KW& 1MVA

NRS RATES FROM 100 KW TO 1 MVA	Two Part Tariff*	Single Part Tariff (MMC)
100KW-1MVA	Fixed Charges = RS 90/KVA	MMC = Rs166/KVA
Energy Charges	0-100 = 606paisa/unit Above 100 = 618 Paisa/unit	0-100 = 645paisa/unit Above 100 = 658 paisa/unit

***U.F at which Single Part Tariff Splits into Two Part Tariff is 13%**

NRS Category consumers with connected load above 1MVA

NRS RATES ABOVE 1 MVA	Two Part Tariff	Single Part Tariff (MMC)
>1 MVA	Fixed Charges = Rs 110/KVA	MMC = Rs166/KVA
Energy Charges	0-100 = 606 paisa/unit Above 100 = 618 Paisa/unit	0-100 = 645 paisa/unit Above 100 = 658 paisa/unit

***U.F at which Single Part Tariff Splits into Two Part Tariff is 13%**

SP Category

SP	Two Part Tariff*	Single Part Tariff (MMC)
UPTO 20 KW	Fixed Charges = Rs35/KW	MMC = Rs153/KW
Energy Charges	544 Paisa/unit	574 Paisa/unit

***U.F at which Single Part Tariff Splits into Two Part Tariff is 12%**

MS Category

MS	Two Part Tariff*	Single Part Tariff (MMC)
20-100KW	Fixed Charges = Rs60/KW	MMC = Rs203/KW
Energy Charges	578 Paisa/unit	626 Paisa/unit

***U.F at which Single Part Tariff Splits into Two Part Tariff is 15%**

PL Category

PL	Two Part Tariff	Single Part Tariff (MMC)
	Fixed Charges = Rs110/KW	As per 8 Hrs/day
Energy Charges	615 Paisa/unit	658 paisa/unit

LS Category General Industry with load upto1MVA

LS GENERAL INDupto1MVA	Two Part Tariff*	Single Part Tariff (MMC)
UPTO 1MVA	Fixed Charges = Rs80/KVA	MMC = Rs182/KVA
Energy Charges	581 paisa/unit	633paisa/unit

***U.F at which Single Part Tariff Splits into Two Part Tariff is 25%**

LS Category General Industry with load above1MVA

GENERAL IND ABOVE 1MVA	Two Part Tariff*	Single Part Tariff (MMC)
ABOVE 1 MVA	Fixed Charges = Rs/120/KVA	MMC = Rs182/KVA
Energy Charges	587 Paisa/Unit	633 Paisa/Unit

***U.F at which Single Part Tariff Splits into Two Part Tariff is 25%**

LS CategoryPIU with load upto1MVA

LSPIUPTO1MVA	Two Part Tariff*	Single Part Tariff (MMC)
UPTO 1MVA	Fixed Charges = Rs100/KVA	MMC = Rs478/KVA
Energy Charges	581 Paisa/Unit	633 Paisa/Unit

***U.F at which Single Part Tariff Splits into Two Part Tariff is 33%**

LS CategoryPIU with load above1MVA

PIU ABOVE 1MVA	Two Part Tariff*	Single Part Tariff (MMC)
ABOVE 1 MVA	Fixed Charges = Rs140/KVA	MMC = Rs478/KVA
Energy Charges	587 Paisa/Unit	633 Paisa/Unit

***U.F at which Single Part Tariff Splits into Two Part Tariff is 33%**

Bulk Supply Category

BS LT (All Connections)	Two Part Tariff*	Single Part Tariff (MMC)
LT SUPPLY	Fixed Charges = Rs130/KVA	MMC = Rs299/KVA
Energy Charges	618 Paisa/Unit	657 Paisa/Unit

***U.F at which Single Part Tariff Splits into Two Part Tariff is 32%**

Bulk Supply Category HT upto 1MVA

BS HT upto 1 MVA (All Connections)	Two Part Tariff*	Single Part Tariff (MMC)
UPTO 1 MVA	Fixed Charges = Rs140/KVA	MMC = Rs299/KVA
Energy Charges	544 Paisa/Unit	629 Paisa/Unit

***U.F at which Single Part Tariff Splits into Two Part Tariff is 24%**

Bulk Supply Category HT above 1MVA

BS HT more than 1 MVA (All Connections)	Two Part Tariff*	Single Part Tariff (MMC)
ABOVE 1 MVA	Fixed Charges = Rs140/KVA	MMC = Rs299/KVA
Energy Charges	562 Paisa/Unit	629 Paisa/Unit

***U.F at which Single Part Tariff Splits into Two Part Tariff is 24%**

Railway Traction Category

RT	Two Part Tariff*	Single Part Tariff (MMC)
ALL	Fixed Charges = Rs120/KVA	MMC = 306 PER KVA
Energy Charges	590 Paisa/unit	658 Paisa/Unit

***U.F at which Single Part Tariff Splits into Two Part Tariff is 25%**

Seasonal Category upto 100 KW

RATES UPTO100 KW	Two Part Tariff*	Single Part Tariff (MMC)
	Fixed Charges = Rs60/KW	SEASONAL TARIFF
Energy Charges	578 Paisa/Unit	

Seasonal Category having load between 100 KW & 1MVA

RATES FROM 100kW TO 1 MVA	Two Part Tariff*	Single Part Tariff (MMC)
	Fixed Charges = Rs80/KVA	SEASONAL TARIFF
Energy Charges	581 Paisa/Unit	

Seasonal Category having load above 1MVA

RATES ABOVE 1 MVA	Two Part Tariff*	Single Part Tariff (MMC)
	Fixed Charges = Rs120/KVA	SEASONAL TARIFF
Energy Charges	587 Paisa/Unit	

A6 PERFORMAS

Performa -1

Domestic consumers with connected load up to 20 KW

Revenue from SOP

Billing Cycle	Category of consumers	Name of Division	SOP with existing Single Part Tariff	SOP with proposed two part tariff	Variation in %age
3	Up to 3kW	ASR	151529778	152755170	0.81%
		BTD	78438825	78637818	0.25%
		JAL	74511594	74764511	0.34%
		PAT	70653059	70753591	0.14%
		EST	74670529	74850483	0.24%
		Total	449803785	451761573	0.44%
		3	More than 3kW&Upto7kW	ASR	75211628
BTD	15884806			16139195	1.60%
JAL	36540454			37296231	2.07%
PAT	28630803			29049588	1.46%
EST	24978684			25388473	1.64%
Total	181246375			184448214	1.77%
3	More than 7kW&Upto20kW			ASR	56231059
		BTD	5322589	5398049	1.42%
		JAL	27767131	28377477	2.20%
		PAT	13224753	13474494	1.89%
		EST	30495355	31217860	2.36%
		Total	133040887	135771492	2.05%
		DS Category Grand Total		764091047	771981279

Domestic consumers with connected load between 20 KW and 100 KW

Revenue from SOP

S.No.	Billing Cycle	Name of Division	TARIFF	Category of consumers	SOP with existing Single Part Tariff	SOP with proposed two part tariff	Variation in %age
1	Cycle 06	EAST DIVISION	DS	20-100	2297833	2388574	3.94%
2	Cycle 06	MAUR DIVISION	DS	20-100	855580	852593	0.34%
3	Cycle 06	PHAGWARA	DS	20-100	2295962	2386439	3.94%
4	Cycle 06	NABHA DIVISION	DS	20-100	541605	566018	4.50%
5	Cycle 06	FOCAL POINT SPL.	DS	20-100	1787948	1877734	5.02%
6	Cycle 06	Grand Total	DS	20-100	7778928	8071358	3.62

Domestic consumers with connected load greater than 100 KW

Revenue from SOP

Billing Cycle	Category	Name of Division	No of Consumers	SOP with Existing Single Part Tariff (in Rs Crores)	SOP with Proposed Two Part Tariff (in Rs crores)	Percentage Variation in SOP
8/2013	More than 100 KW	Nabha	3	0.074	0.076	2.00
		Maur	3	0.276	0.288	4.62
		East Div Amritsar	9	0.638	0.643	0.79
		Phagwara	1	0.013	0.013	3.85
		Focal Point Ludhiana	0	0	0	0
		Total		16	1.000	1.020

Performa -2

NRS consumers with connected load up to 20 KW

Revenue from SOP

Billing Cycle	Category of consumers	Name of Division	SOP with existing Single Part Tariff	SOP with proposed two part tariff	Variation in %age
3	Up to 3kW	ASR	19275982	18005466	-6.59%
		BTD	8913454	8403957	-5.72%
		JAL	12187716	11352771	-6.85%
		PAT	9351587	8750121	-6.43%
		EST	10027152	9406897	-6.18%
		Total	59755891	55919212	-6.42%
3	More than 3kW&Upto7kW	ASR	7340700	7042809	-4.06%
		BTD	2403983	2237209	-6.94%
		JAL	6026287	5742532	-4.71%
		PAT	3302008	3134973	-5.06%
		EST	3526616	3377698	-4.22%
		Total	22599594	21535221	-4.71%
3	More than 7kW&Upto20kW	ASR	20093957	19617202	-2.37%
		BTD	6901747	6718235	-2.66%
		JAL	11522856	11338365	-1.60%
		PAT	7098170	6975612	-1.73%
		EST	10641771	10404619	-2.22%
		Total	56258501	55054033	-2.14%
		NRS Category Grand Total	138613986	132508466	-4.40%

NRS consumers with connected load between 20KW and 100 KW

Revenue from SOP

S.No.	Billing Cycle	Name of Division	TARIFF	Category of consumers	SOP with existing Single Part Tariff	SOP with proposed two part tariff	Variation in %age
1	Cycle 06	EAST DIVISION	CS	20-100	12179634	12408956	1.88%
2	Cycle 06	MAUR DIVISION	CS	20-100	2273041	2313398	1.77%
3	Cycle 06	PHAGWARA	CS	20-100	6510747	6658051	2.26%
4	Cycle 06	NABHA DIVISION	CS	20-100	2971955	3004410	1.09%
5	Cycle 06	FOCAL POINT SPL.	CS	20-100	4551750	4623506	1.57%
6	Cycle 06	PUNJAB TOTALS	CS	20-100	28487127	29008321	1.80

NRS consumers with connected load above 100 KW

Revenue from SOP

Billing Cycle	Category of consumers	Name of Division	SOP with Existing Single Part Tariff (in RsCRORES)	SOP with Proposed Two Part Tariff (in RsCRORES)	Percentage Variation in SOP	
8/2013	100 KW TO 1 MVA	Nabha	0.082	0.090	9.56	
		Maur	0.083	0.103	23.54	
		East Div Amritsar	0.968	1.011	4.43	
		Phagwara	0.272	0.309	13.76	
		Focal Point Ludhiana	0.395	0.446	12.93	
		Total	1.800	1.959	8.82	
		ABOVE 1 MVA	Nabha	0	0	0
	Maur		0	0	0	
	East Div Amritsar		0.568	0.646	13.69	
	Phagwara		0.136	0.140	2.81	
	Focal Point Ludhiana		0.068	0.081	20.53	
	Total		0.772	0.868	12.37	
	G.TOTAL in Rscrores			2.572	2.827	9.91

Performa -3

Small Power

Revenue from SOP

S.No	Billing Cycle	Category of consumers	Name of Division	SOP with existing single part tariff	SOP with proposed two part tariff	Variation in %age
1	Cycle 06	SP	East Division	15725952	15552543	-1.10%
			Maur Division	4490330	4472944	-0.39%
			Focal Point SPL	8910492	8749892	-1.80%
			Phagwara	5295602	5269193	-0.50%
			Nabha	4583630	4563089	-0.45%
			Total	39006006	38607661	-1.02%

Performa -4

Medium Supply

Revenue from SOP

S.No.	Blling Cycle	Name of the Division	SOP with existing single part tariff	SOP with proposed two part tariff	Variation in %age
1	Cycle 06	EAST DIVISION	33097312	32661572	-1.31%
		MAUR DIVISION	4210867	4280280	1.64%
		FOCAL POINT SPL.	83877312	83442910	-0.51%
		PHAGWARA	7785675	7887714	1.31%
		NABHA DIVISION	5663802	5948177	5.02%
		TOTAL	134634968	134220653	-0.31%

Performa -5

Public Lighting

Revenue from SOP

S.No	Billing Cycle	Category of consumers	Name of Division	SOP with existing single part tariff	SOP with proposed two part tariff	Variation in %age
1	Cycle 06	PL	East Division	2020658	2070917	2.49%
			Maur Division	628808	624146	-0.74%
			Focal Point SPL	2121118	2175004	2.54%
			Phagwara	923819	929690	0.64%
			Nabha	487407	485047	-0.48%
			Total	6181810	6284804	1.67%

Performa -6

Large Supply

Revenue from SOP

Billing Cycle	Category of Consumers	Name of Division	SOP with Existing Single Part Tariff LS Category (Rs in crores)	SOP with Proposed Two Part Tariff (Rs in Crore)	Percentage Variation in SOP single tariff & PSERC RATES
Cycle -8	General Industry, Contract Demand upto 1 MVA	Nabha	0.469	0.479	2.12
		Maur	0.375	0.384	2.28
		East Div Amritsar	4.289	4.177	-2.61
		Phagwara	0.246	0.260	5.37
		Focal Point	17.332	17.743	2.37
		Total	22.712	23.043	1.45
	General Industry, Contract Demand Above 1 MVA	Nabha	0.955	0.933	-2.31
		Maur	7.730	7.846	1.49
		East Div Amritsar	4.534	4.565	0.68
		Phagwara	3.078	3.001	-2.51
		Focal Point	17.312	17.492	1.04
		Total	33.610	33.837	0.68
	PIU/ARC Furnace, Contract Demand upto 1 MVA	Nabha			
		Maur			
		East Div Amritsar			
		Phagwara	0.057	0.060	5.57
		Focal Point	0.907	0.929	2.47
		Total	0.964	0.990	2.66
	PIU/ARC Furnace, Contract Demand above 1 MVA	Nabha	0.086	0.115	33.27
Maur					
East Div Amritsar					
Phagwara					
Focal Point		20.485	21.215	3.57	
Total		20.571	21.330	3.69	
Grand Total in Rs. Crores			77.857	79.199	1.72%

Performa -7

Railway Traction

Revenue from SOP

S.No	Billing Cycle	Category of consumers	Name of Division	SOP with existing single part tariff	SOP with proposed two part tariff	Variation in %age
1	Cycle 03	RT		5.892	6.767	14.85%
2	Cycle 04			6.999	7.831	11.89%
3	Cycle 05			7.216	7.472	3.55%
4	Cycle 06			8.097	8.262	2.04%
5	Cycle 07			7.514	7.740	3.01%
6	Cycle 08			7.588	7.806	2.87%
			Total	43.306	45.878	5.94%

Performa -8

Bulk Supply

Revenue from SOP

S.No.	Billing Cycle	Category of Consumers	SOP with Existing Single Part Tariff (in Rs Cr.)	SOP with Proposed Two Part Tariff (in Rs Cr.)	Percentage Variation in SOP single tariff & Two Part Tariff
1	8/2013	LT (All Connections)	1.795	1.869	4.13
		HTupto 1 MVA (All Connections)	4.850	4.958	2.22
		HT more than 1 MVA (All Connections)	24.046	24.684	2.65
		Total	30.691	31.510	2.67

Performa -9

Domestic category with connected load up to 20 Kw

DS - up to 20 KW Cycle-03			
Utilization Factor Range	Connected Load		
	0-3 L	3.01 -7 L	7.01 -20 L
0-2.5%	13946	3470	1405
2.51-5%	13837	4720	1901
5.01-7.5%	16556	6053	2223
7.51-10%	18613	6262	2308
10.01-15%	35907	9332	3254
15.01-20%	29236	5034	1521
20.01-25%	22687	2558	645
25.01-30%	16854	1223	281
30.01-35%	12737	582	118
35.01-40%	9307	299	50
40.01-45%	6857	144	25
45.01-50%	5290	79	10
50.01-60%	7364	77	14
60.01-70%	4430	28	6
ABOVE 70%	10850	33	14
TOTAL	224471	39894	13775

Domestic category with connected load between 20 Kw and 100 kW

Utilization Factor Range	Cycle – 06
0-2.5%	49
2.51-5%	80
5.01-7.5%	87
7.51-10%	99
10.01-15%	118
15.01-20%	49
20.01-25%	9
25.01-30%	5
30.01-35%	4
35.01-40%	2
40.01-45%	4
45.01-50%	2
50.01-60%	2
60.01-70%	0
ABOVE 70%	1
TOTAL	511

Domestic category with connected load greater than 100 kW

Sr No	Utilization Factor Range	CYCLE 8
1	0 to 2.5 %	2
2	More than 2.5 % and upto 5%	3
3	More than 5 % and upto 7.5%	1
4	More than 7.5 % and upto 10%	2
5	More than 10 % and upto 15%	1
6	More than 15 % and upto 20%	0
7	More than 20% and upto 25%	1
8	More than 25 % and upto 30%	2
9	More than 30% and upto 35%	2
10	More than 35 % and upto 40%	1
11	More than 40 % and upto 45%	0
12	More than 45 % and upto 50%	0
13	More than 50 % and upto 60%	0
14	More than 60 % and upto 70%	0
15	More than 70 %	1
	Total Consumers	16

NRS category with connected load up to 20 kW

NRS up to 20 KW Cycle - 03			
Utilization Factor Range	Connected Load		
	0-3 L	3.01 -7 L	7.01 -20 L
0-2.5%	6016	854	366
2.51-5%	5861	1043	511
5.01-7.5%	4951	849	482
7.51-10%	3975	565	390
10.01-15%	5740	748	496
15.01-20%	4055	467	407
20.01-25%	2525	206	205
25.01-30%	1758	80	129
30.01-35%	1170	63	95
35.01-40%	817	48	70
40.01-45%	617	22	42
45.01-50%	506	14	45
50.01-60%	696	15	30
60.01-70%	455	7	19
ABOVE 70%	1194	16	19
TOTAL	40336	4997	3306

NRS category with connected load between 20 Kw and 100 kW

NDS 20 -100 KW Cycle - 06	
Utilization Factor Range	No. of consumers
0-2.5%	69
2.51-5%	126
5.01-7.5%	168
7.51-10%	150
10.01-15%	232
15.01-20%	135
20.01-25%	55
25.01-30%	45
30.01-35%	39
35.01-40%	15
40.01-45%	8
45.01-50%	4
50.01-60%	5
60.01-70%	2
ABOVE 70%	6
TOTAL	1059

NRS category with connected load greater than 100 kW

Sr No	Utilization Factor Range	BILLING CYCLE 8	
		100 KW TO 1MVA	ABOVE 1 MVA
1	0 to 2.5 %	5	1
2	More than 2.5 % and upto 5%	12	0
3	More than 5 % and upto 7.5%	15	1
4	More than 7.5 % and upto 10%	12	1
5	More than 10 % and upto 15%	21	0
6	More than 15 % and upto 20%	16	0
7	More than 20% and upto 25%	9	1
8	More than 25 % and upto 30%	2	2
9	More than 30% and upto 35%	3	0
10	More than 35 % and upto 40%	1	0
11	More than 40 % and upto 45%	1	0
12	More than 45 % and upto 50%	1	0
13	More than 50 % and upto 60%	1	0
14	More than 60 % and upto 70%	0	0
15	More than 70 %	0	0
Total Consumers		99	6

SP category

SP - Cycle 6		
S. No	Utilization factor Range	No. of consumers
1	0 - 2.5%	914
2	2.51 - 5%	1097
3	5.01 - 7.5%	965
4	7.51-10%	718
5	10.01 - 15%	967
6	15.01 -20%	551
7	20.01 - 25%	276
8	25.01 - 30%	171
9	30.01 - 35%	136
10	35.01 - 40%	91
11	40.01 - 45%	61
12	45.01 - 50%	46
13	50.01 - 60%	47
14	60.01 - 70%	28
15	Above 70%	48
	Total	6116

MS category

MS Category - Cycle 06		
S.No	Utilization Factor Range	No. of consumers
1	0-2.5%	401
2	2.5-5.0%	459
3	5.01-7.5%	333
4	7.51-10%	268
5	10.01-12.5%	213
6	12.51-15.0%	179
7	15.01-17.5%	141
8	17.51-20.0%	127
9	20.01-22.5%	108
10	22.51-25.0%	83
11	25.0-27.5%	70
12	27.51-30.0%	79
13	30.01-32.5%	67
14	32.51-35.0%	53
15	35.01-37.5%	44
16	37.51-40.0%	32
17	40.01-42.5%	24
18	42.51-45.0%	29
19	45.01-47.51%	78
20	47.51-50.0%	0
	TOTAL	3146

Public Lighting category

PL - Cycle 6		
S. No	Utilization factor Range	No. of consumers
1	0 - 5%	122
2	5-10%	10
3	10-15%	16
4	15-20%	9
5	20-25%	12
6	25-30%	6
7	30-35%	12
8	35-40%	8
9	Greater than 40%	325
	Total	520

Large Supply category

Sr No	Utilization Factor Range	Billing Cycle 8			
		General (upto 1 MVA)	General (above 1 MVA)	PIU (upto 1 MVA)	PIU (above 1 MVA)
1	0 to 2.5 %	67	5	0	0
2	More than 2.5 % and upto 5%	53	2	0	0
3	More than 5 % and upto 7.5%	76	3	0	0
4	More than 7.5 % and upto 10%	76	6	0	0
5	More than 10 % and upto 15%	134	14	4	4
6	More than 15 % and upto 20%	117	12	0	4
7	More than 20% and upto 25%	89	7	6	2
8	More than 25 % and upto 30%	46	7	3	4
9	More than 30% and upto 35%	44	7	4	2
10	More than 35 % and upto 40%	13	4	0	4
11	More than 40 % and upto 45%	12	2	0	4
12	More than 45 % and upto 50%	11	3	0	0
13	More than 50 % and upto 60%	11	4	1	3
14	More than 60 % and upto 70%	5	0	0	1
15	More than 70 %	4	0	0	0
Total Consumers		758	76	18	28

Bulk Supply Category

Sr No	Utilization Factor Range Cycle - 08	LT	HT(upto 1 MVA)	HT (above 1 MVA)
1	0 to 2.5 %	6	0	4
2	More than 2.5 % and upto 5%	5	0	8
3	More than 5 % and upto 7.5%	3	0	4
4	More than 7.5 % and upto 10%	7	4	9
5	More than 10 % and upto 15%	22	6	21
6	More than 15 % and upto 20%	25	10	27
7	More than 20% and upto 25%	24	9	15
8	More than 25 % and upto 30%	35	6	12
9	More than 30% and upto 35%	31	3	7
10	More than 35 % and upto 40%	31	6	5
11	More than 40 % and upto 45%	23	6	4
12	More than 45 % and upto 50%	16	4	6
13	More than 50 % and upto 60%	8	0	3
14	More than 60 % and upto 70%	2	0	0
15	More than 70 %	6	1	3
Total Consumers		244	55	128

Performa -10

Seasonal Category (LS)

Revenue from SOP

S.No	Billing period	Category of Consumers	Name of Division	SOP with Existing Single Part Tariff Seasonal & non-seasonal Rates(in crores)	SOP with Proposed Two Part Tariff (Rs in Crore)	Percentage Variation in SOP single tariff
1	1 OCT 2012 TO 30 SEP 2013 SEASON & OFF-SEASON	Seasonal Industry, Contract Demand upto 1 MVA	Nabha	1.26	1.46	15.80
			Maur	4.54	5.27	15.93
			East Div Amritsar	2.75	2.87	4.36
			Phagwara	1.62	1.81	12.14
			Focal Point Ludhiana	0.083	0.098	17.51
			Total in Rscrores	10.26	11.51	12.24
		Seasonal Industry, CD Above 1 MVA TOTAL PSPCL revenue in Rscrores		34.42	37.69	9.48

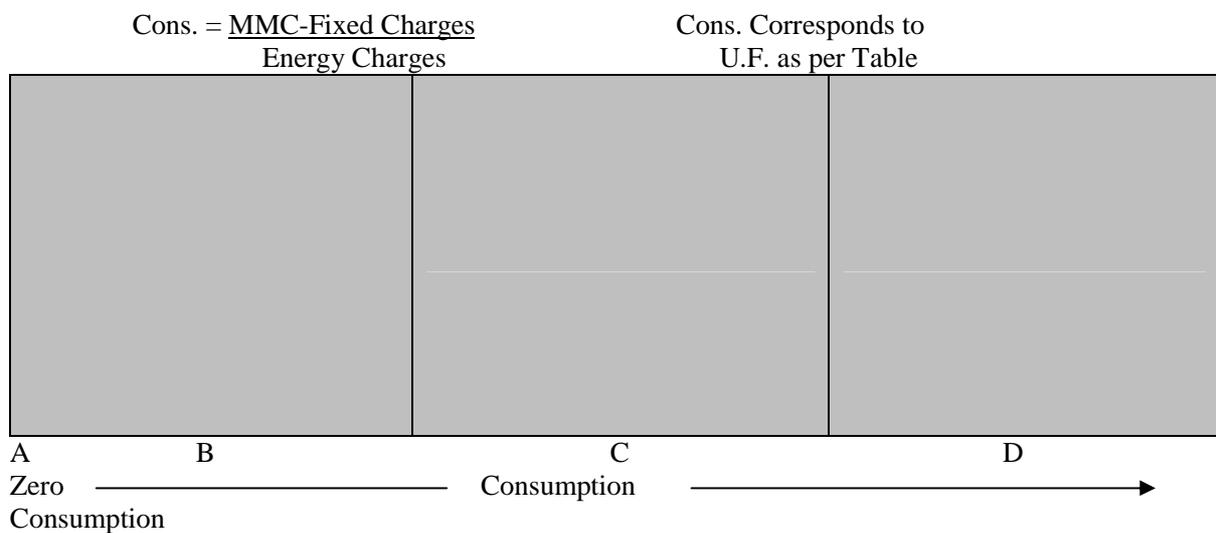
Rice Sheller – MS Category

Revenue from SOP

Billing period	Category of Consumers	Name of Division	No of Consumers	SOP with Existing Single Part Tariff Seasonal & non-seasonal Rates(in crores)	SOP with Proposed Two Part Tariff (Rs in Crore)	Percentage Variation in SOP single tariff & PSERC RATES
1 OCT 2012 TO 30 SEP 2013 SEASON & OFF-SEASON	Seasonal Industry	EAST AMRITSAR	3	2854110	2910023	1.96%
		MAUR	22	17885265	19043266	6.47%
		PHAGWARA	3	2458161	2462716	0.19%
		NABHA	102	43313027	45626013	5.34%
		FOCAL POINT	0	0	0	0.00%
	Total in Rscrores				66510563.00	70042017.52

A7 OBSERVATIONS

- 3.1. As per the results of the study, on considering the two part rates as proposed by PSPCL, the revenue of PSPCL remains almost neutral.
- 3.2. However, it is reiterated that the two part tariff has characteristics that the low consumption consumers pay more and the consumers having higher consumption pay less, which is also clear from the results obtained in the mock trials & Impact of Two Part Tariff based on consumers' Consumption is clear from the following diagram:



From the above Table it is concluded that if a consumer is having the consumption in the range of A B & C D, the billing of consumer will be reduced in two part Tariff as compared to single part Tariff. If the consumer is having its consumption in the range of B C, then the billing of the consumer will be increased as compared to single part Tariff which is also essential requirement of revenue neutrality i.e. if some of the consumers are to gain then some other consumers shall have to lose.