EXECUTIVE SUMMARY

1. Preamble

MERC has issued the MYT Regulations 2011 for the 2nd Control Period (FY 2011-12 to FY 2015-16) on 4th February 2011 which came into force from 1st April 2011. However expressing concerns over certain provisions of the MYT Regulations MSEDCL had filed a petition requesting for deferment of implementation of MYT Regulations. MERC has exempted the determination of tariff of MSEDCL under the Multi-Year Tariff framework till March 31, 2013 by its Order dated August 23, 2011 (Case No. 24 of 2011) without giving any relief or exemption on issues related to MYT Provisions raised by MSEDCL in its Petition.

Power procurement is a function of various external uncontrollable factors such as availability of fuel/water, seasonal variations, economic policies of the State Governmentt, Agriculture, Industrial and other developments in the State etc. Certain factors like hydrology, rains, natural calamities, forced shut down, fuel scarcity, lack of water availability to power plants due to less rainfall which affects the generation are beyond the control of MSEDCL/MSPGCL. The commissioning of project gets delayed due to various reasons such as land acquisition, lack of fuel supply, Ministry of Environment and Forests (MoEF) Clearance, local agitation etc. which is again not in the hands of MSEDCL/MSPGCL.

A detailed study of various internal as well external factors is required to estimate the expected sales and based on that the power procurement plan can be finalized. The seasonal variations, economic developments, global fluctuations in various activities are some of the uncontrollable external factors affecting the consumption.

Thus MSEDCL feels that it is difficult to estimate the expected consumption and corresponding power purchase accurately and hence MSEDCL is categorically against the concept of the MYT. However, as a statutory requirement, MSEDCL is submitting this business plan on the insistence of MERC.

The business plan as submitted under MYT Regulations 2011 will be considered as a base for determination of tariff for future period. Business plan is a dynamic document depending upon various internal and external factors; the impact of such future uncontrollable events if linked to the tariff may have an adverse financial impact on MSEDCL.

2. Introduction

MSEDCL is a company registered under the Companies Act 1956, distributing electricity in the state of Maharashtra and few suburbs of Mumbai. The Commission in the Tariff Order dated 16th August 2012 has directed MSEDCL to submit Business Plan for the control period of FY 2013-14 to FY 2015-16 covering the Strategic and Operational Plan for the Company.

MSEDCL has prepared the Business Plan taking cognizance of the existing internal factors and external business environment affecting the business. MSEDCL submits that the Business plan being a dynamic document may need to be updated at periodic intervals taking into account the changes in the internal and external environment and these changes would be intimated to the Hon'ble Commission from time to time.

3. Background

The Hon'ble Commission vide its letter dated 17th July 2012 has directed MSEDCL to submit "Business Plan Petition" for second control period for the period FY 2013 – 14 to FY 2015 – 16, on or before 20th August 2012 in the formats provided by the Hon'ble Commission. However in the tariff order dated 16th August 2012, the Hon'ble Commission has directed MSEDCL to submit the business plan by 30th November 2012.

Accordingly, MSEDCL has submitted the business plan for FY2011-12 to FY 2015-16 on 30th November 2012. During the Technical Validation Session (TVS) on 26 December, 2012, Hon'ble Commission has directed MSEDCL to submit the business

plan considering the segregation of Wires and Supply Business; voltage wise cost of supply; scenario analysis of power purchase with respect to fluctuations of coal prices etc. Accordingly MSEDCL hereby submitting the revised business plan considering segregation of Wires and Supply Business based on certain assumptions and scenario analysis of power purchase.

Transfer Scheme: Government of Maharashtra, in exercise of powers under Section 131, 133 & 134 of the Electricity Act, 2003 has framed a "Transfer Scheme" for providing & giving effect to the transfer of properties, interests, rights, liabilities, obligations, proceeding & personnel of erstwhile Maharashtra State Electricity Board to its successor entities including MSEDCL. Since the Final Transfer Scheme is yet to be framed, Hon'ble Commission may consider the final transfer value of assets in case the final transfer scheme gets notified during the control period.

FAC Mechanism: MYT Regulations 2011 mandates Distribution Licensee to submit details relating to fuel costs to the Hon'ble Commission after completion of first half for prior approval of Z-factor charge to be recovered in future period delaying the recovery of fuel charges paid to generating companies. Hon'ble Appellate Tribunal in its Order dated November 11, 2011 has directed that fuel cost adjustment should preferably be on monthly basis but in no case exceeding a quarter. Therefore MSEDCL submits that considering the adverse effects on MSEDCL finances due to delay in recovery, Hon'ble Commission during the next tariff proceedings may allow the carrying cost for such delay at the time of determination of tariff.

Depreciation: As per MYT Regulations 2011, salvage value of asset is considered at 10 per cent of the allowable capital cost and depreciation is allowed up to a maximum of 90 per cent of the allowable capital cost of the asset. It is also provided that once the individual asset is depreciated to the extent of seventy (70) percent, remaining depreciable value as on 31st March of the year closing will be spread over the balance useful life of the asset. However, without details of balance useful life of various assets, MSEDCL has used the rate of depreciation as per MYT Regulations 2011 and provided depreciation on 50% of addition of Assets during the year in addition to depreciation on Opening GFA as per the practice in vogue.

The Business Plan is started based on a review of "what is" on the Company's current operations, operational performance and organisation structure. The formulation of strategies is driven by the consideration of the vision, mission and values that the Company holds and cherishes. The existing profile of the Company, its strengths and weaknesses, its policies, and the emerging legal and business environment plays an important role in the formulation of the plan.

4. Objective of Business Plan

As per the Forum of Regulators recommendation "Distribution licensees should submit the business plan and power purchase plan, for approval of the Commission, at least six months prior to submission of MYT petitions". MSEDCL has developed a comprehensive business plan for the company for the period FY 2013-14 to FY 2015-16. The business plan in following sections intends to cover above issues from the strategic, competitive, financial, commercial and organisational perspectives.

5. Segregation of Wires & Supply Business

The Electricity Act, 2003 does not have any specific provision which makes it compulsory for the utility to comply with the separation of accounts, which is very much evident that till date no state has separate books of accounts for wires & supply business. MSEDCL further submits that presently it does not maintain the separate accounts for wires & supply business & the new software systems are under implementation which will take time to streamline. Based on certain assumptions, MSEDCL has allocated the expenses into wires and supply business in the ratios shown in following table.

Sr. No.	Particulars	Wires Business	Supply Business
1.	Power Purchase Expenses Fixed Charges	5%	95%
2.	Power Purchase Expenses Variable Charges		100%
3.	Employee Expenses	75%	25%
4.	Administration & General Expenses	75%	25%
5.	Repair & Maintenance Expenses	95%	5%

Sr. No.	Particulars	Wires Business	Supply Business
6.	Depreciation	90%	10%
7.	Interest on Long-term Loan Capital	90%	10%
8.	Interest on Working Capital	100%	0%
9.	Other Finance Charges	90%	10%
10.	Provision for Bad Debts	10%	90%
11.	Other Expenses	0%	100%
12.	Income Tax	90%	10%
13.	Transmission Charges paid to Transmission Licensee		100%
14.	Contribution to contingency reserves	90%	10%
15.	Incentive and Discounts	0%	100%
16.	Return on Equity Capital	90%	10%
17.	Non Tariff Income	0%	100%
18.	Income from wheeling charges	100%	0%

MSEDCL submits that the percentage allocation for segregation of Retail Supply and Wires Business Expenses is purely on the basis of assumptions and cannot be treated as basis for any accounting purposes. MSEDCL further submits that at present MSEDCL will continue to maintain the accounts as per present mechanism and as when new software system is in place and gets streamlined, MSEDCL may submit information on separate for wires & supply in future. **MSEDCL categorically submits that this segregation is only for the purpose of the determination of aggregate revenue requirement for Business Plan.**

6. Company Profile

MSEDCL is a registered Company under the Companies Act 1956 engaged in the business of developing, operating and maintenance of distribution system for supplying electricity to the consumers in its area of supply.

As a distribution licensee, MSEDCL is carrying out the retail supply of power to the end users and maintain the wire business for supply of such power. MSEDCL is also engaged in the process of tying up generation capacity for a long / medium / short term power from the competitive sources and developing distribution infrastructure. It is also engaged in improving its technical and financial performance with reference

to national benchmarks by adopting the best available practices and absorbing the best available technologies.

a. Vision and Mission Statement

- **Vision**

Being the largest distribution utility in India, MSEDCL desires to be amongst the best power utilities in the country which is envisaged in its Vision statement which states:

"To be the best power distribution utility of India by delivering affordable, reliable and quality service to the consumers and contribute to the sustainable development of the State and the country as a whole."

- **Mission**

MSEDCL has outlined its mission for the Company which states that,

a. We, as professional Company, rededicate ourselves to serve all our customers by extending reliable and quality power supply at reasonable and competitive tariffs so as to boost agricultural, industrial and overall economic development of Maharashtra.
b. We commit to Honesty, Integrity and Transparency in actions to achieve higher standards of Consumers Satisfaction.
c. We aim at achieving technological excellence and financial turnaround for the overall benefit of the customers.
d. We will strive hard for system improvement and stress upon preventive maintenance.
e. We will ruthlessly curb the theft of electricity.
f. We will encourage and support energy saving activities and Demand Side Management thereby optimizing the use of electricity.
g. We will fulfil our commitment to society by improving quality of life.

- **Ways to fulfil Vision and Mission**

At the time of segregation, MSEDCL chalked out the Ten Point Program to achieve its Mission Statement, which includes:

– Improving quality of supply and reduction of interruptions.
– Consumer Grievances Redressal Systems.
– Proactive distribution network planning

- Distribution system loss reduction
- Improvement in Collection efficiency
- Circles to act as profit centres
- Use of technological advance and computerization
- Improved services
- Initiative undertaken for employees welfare
- Demand Side Management and peak load management

7. Major achievements of MSEDCL

In the past five years MSEDCL through the initiation of the Ten Point plan has (carried out) taken up a number of initiatives to achieve better strategic execution operational efficiency and better consumer satisfaction. Some of the major achievements of MSEDCL are:

Energization of Agricultural pumps: Maharashtra with around 34 lakhs pump sets has the record of highest number of energized pump sets in the country. Previously, there were long pending application from farmers for supply. Now with strengthened infrastructure MSEDCL has reduced the waiting period for release of connection.

Loss Reduction: MSEDCL has reduced distribution losses from 29.5% in FY 2006-07 to 16.03% in FY 2011-12. This has been achieved through implementation of special drives and campaigns like Anti power theft drive, Mass Meter Replacement Project, implementing methods for accurate energy audit etc.

8. Operational Profile of MSEDCL

After the restructuring of MSEB into four entities, under the transfer schemes, the GoM had allocated MSEDCL, all the assets and liabilities concerning the distribution of electricity in the State of Maharashtra which includes 14 Zones consisting of all 33 kV, 22 kV, 11 kV, LT lines & associated network & sub-stations.

In just three years, MSEDCL reduced distribution losses from 29.5% to 16.03% and collection efficiency improved from 89.2% to 97.3%. Also, Monthly revenues shot up from Rs. 1100 Crores to Rs. 3000 Crores. Today the demand is about 15000 MW, which is higher than the demand of any other progressive state in the country.

Currently, MSEDCL supplies electricity to over two crores consumers across the categories all over Maharashtra excluding an island city of Mumbai and has revenues about ~ Rs. 38000 Crores in FY 2011-12. MSEDCL sources of power include thermal, hydro, gas and non-conventional sources like solar, wind, bagasse, etc. Apart from hydro power of Koyna, thermal power constitutes the major share which it gets from MAHAGENCO Projects, central projects and RGPPL. MSEDCL's present power demand ranges between 13000 MW – 15000 MW and availability remains between 12000 MW – 14200 MW leaving a gap of around 100-800 MW.

In terms of infrastructure, MSEDCL operates a vast network comprising of Lakhs of transformers and kilometres of lines as well as thousands of substations spread over 3.08 Thousand sq.km geographical area of Maharashtra covering 41,015 villages and 457 towns. Presently, MSEDCL has following distribution network in the State of Maharashtra:

Particulars	Unit	31st Mar'10	31st Mar'11	31st Mar'12
No. of Substation				
a. 33/11 KV	No.	1846	2026	2265
b. 33/22 KV	No.	31	33	40
c. 22/11 KV	No.	83	89	98
No. of Switching Stations (22 &11 KV)	No.	73	86	111
High Tension Line				
a. 33 KV Overhead & Underground	CKT-KM	32043	34151	36803
b. 22 KV Overhead & Underground	CKT-KM	25620	27532	28958
a. 11 KV Overhead & Underground	CKT-KM	213609	231439	245149
Low tension Line (415 Volt)				

Particulars	Unit	31st Mar'10	31st Mar'11	31st Mar'12
a. Overhead	KM	513622	531980	550762
b. Underground	KM	7891	8367	9151
Power Transformer				
Total Installed	No.	3186	3613	4050
Installed Capacity	MVA	16389	19032	21837
Distribution Transformer				
Total Installed	No.	351243	391574	439653
Installed Capacity	MVA	32697	36186	40356

9. Operational Performance

a. Analysis of Demand & Supply of Power

Maharashtra has been adding capacities in generation and also strengthening its infrastructure to be used for Transmission and Distribution of additional power in the State. These activities of the last 4 – 5 years have started yielding results and Maharashtra is moving towards load shedding free regime.

Demand Supply Scenario (MW) during peak demand

Particulars	FY 06	FY 07	FY 08	FY 09	FY 10	FY 11	FY 12	FY 13*
Demand	13290	14252	13934	13272	13662	14047	14931	14760
Availability	9212	9638	10130	10203	10919	11917	12841	13173
Shortfall	4078	4614	3804	3069	2743	2130	2090	1587

**Upto Oct 2012*

b. Sale of Power

Below table provides a summary of LT and HT consumers for FY 2005 – 06 to FY 2011 – 12. Total sales to HT consumer category have grown at a 5-year CAGR of 5% and LT consumers by 16 % during the same period.

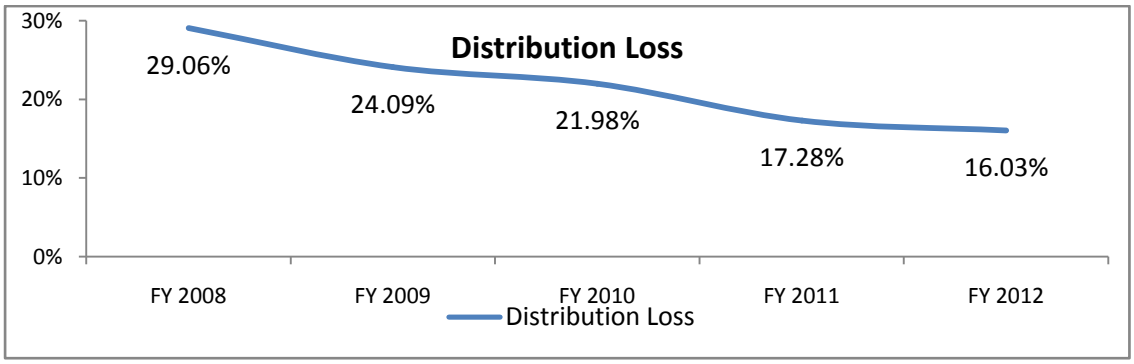
Sale of power to HT & LT Consumer Category (MUs)

Consumer Category	FY 06	FY 07	FY 08	FY 09	FY 10	FY 11	FY 12
HT	23,999	24,477	25,852	26,285	27,607	29,500	30,367
LT	26,766	24,669	29,033	31,887	34,596	36,534	44,176
Total	**50,765**	**49,146**	**54,885**	**58,172**	**62,203**	**66,034**	**74,544**

c. Distribution Loss

The year-wise Distribution loss for MSEDCL is presented below. Earlier attempts to reduce losses were not able to deliver the desired results but it is only now that the impact of these efforts has begun to yield significant results since FY 2011. The main reason for higher distribution loss in the past was the network being overloaded and deteriorated, which in turn was also the main cause of increase in technical losses.

Distribution Losses for FY 2008 – 2012



d. Power Purchase Expense

MSEDCL has tied up with various sources to supply power to their consumers. MSEDCL is largely dependent on the State Generating Station i.e. MAHAGENCO and Central Generating Station to meet their Base load. In order to meet the Peak demand, MSEDCL has tied up with the Short Term Traders as well as through UI and IBSM which is at present considered to be the costliest power sold by the Generator taking advantage of the deficit situation in the Country. Below table displays the different sources of power and percentage of the average MUs and Average Cost for last 6 years.

Source of Power	Average	
	Quantum	Amount
MSPGCL	56%	49%
NTPC	23%	19%
NPCIL	4%	4%
Hydro	1%	1%
RGPPL	8%	13%
Traders & Others	4%	8%
UI & IBSM	1%	1%
NCE & CPP	3%	5%
Total	**100%**	**100%**

e. Amount received for Concession in Bill Amount

MSEDCL bills a consumer as per tariff determined by Hon'ble Commission. GoM provides revenue support to certain category of consumers, which results into concession in bill amount to specified category consumers. The break-up of amount received for concession in bill amount for the various consumer categories is provided in the below table. The State Government was providing free power to agriculture sector. This policy has been changed from 1st June, 2005. However, concessional sale of power to agriculture and power loom sector continues.Break-up of revenue support provided by GoM to various consumer categories is given below.

Rs. In Crs

Particulars	FY 07	FY 08	FY 09	FY 10	FY 11	FY 12
Agriculture	1,229	1,305	1,397	1,865	2,139	3,111
Power Loom	484	471	486	458	754	946

f. Operating Indices of MSEDCL

The basic purpose of calculation of such indices is to develop the sophisticated system. This is also specified in ten point action plan as one of the "Key Key Performance Indicators (KKPIs)". The past performance of MSEDCL is highlighted below:

Reliability Indices	FY 08	FY 09	FY 10	FY 11	FY 12
SAIFI (No.)	12.07	10.84	12.28	17.59	25.04
SAIDI (mins)	386.51	243.20	307.19	90.26	82.62
CAIDI (mins)	32.01	22.43	25.01	5.13	3.30

10. Financial Performance

After analysis of the revenue statement and the Balance Sheet of the Company, it can be analysed that the dependence on the government subsidy as well as the income from other sources has been decreasing. There is a major increase in O&M expenses due to sixth pay commission and R&M activities carried out by the Company.

Net Fixed Assets have grown at a CAGR of 21% due to the Renovation & Modernisation activities as well as major distribution infrastructure plan carried out by MSEDCL to improve the quality of power supply. Fixed Assets have increased to the extent of 33% which shows that major distribution infrastructure activities which have been carried out by MSEDCL are in the phase of capitalisation now. The major capitalisation exercise has been carried out by MSEDCL in last 2 years of around Rs 38,000 crores. The CAPEX plan undertaken includes re-enforcement of the system to provide quality, security and availability of power supply to the consumers, to undertake system development to meet the load growth, achieving the targeted reduction in system losses, undertake automation and other improvement works to enhance customer service and fulfil social obligation such as electrification of un-served areas.

The Debt-Equity ratio has reduced from 0.78 in FY 2007-08 to 0.68 in FY 2008-09 and FY 2009-10. The shareholder's fund during this period has increased at a higher rate than long term liabilities consequently reducing the ratio. However, from 2009-10, the situation has reversed and long term liabilities are now increasing at a relatively higher pace.

11. Power Sector Scenario

The Indian economy has been witnessing more than 9% growth rate in last three

years resulting in major dependence on power to carry out the activities related to production and service affecting the economy. The developing economy has resulted into increase in demand of power whereas the capacity available within the country is not sufficient enough to meet such demand resulting into peak deficit and energy deficit. The growth in demand of electricity and National plan to have a per capita consumption of 1000 units, Indian government has set ambitious goals in the 11th plan to add around 100,000 MW capacities.

The Western region accounts for ~32% of the total generation in the country and also has the highest deficit in the country. The Western region is facing a shortage of nearly 18% in FY 2009-10. The region wise demand supply scenario is shown below:

Region	Energy Requirement (MU)	% Deficit	Peak Demand (MW)	% Deficit
North	2,54,231	12%	37,159	15%
West	2,58,528	14%	39,609	18%
South	2,20,576	6%	32,178	10%
East	87,927	4%	13,220	18%
All India	**8,30,594**	**10%**	**1,23,926**	**13%**

Source: CEA report on Monthly power supply position.

In the past, there has been a consistent gap in the peak demand and peak met as well as in energy terms in the State. The following table shows the actual power supply situation in the state for the past few years.

Period	Peak Demand	Peak Met	Peak Deficit / Surplus	Peak Deficit / Surplus
	(MW)	(MW)	(MW)	(%)
2002-03	11,425	9,004	2,421	21.19
2003-04	11,357	9,315	2,042	17.98
2004-05	12,749	9,704	3,045	23.88
2005-06	13,290	9,212	4,078	30.68

Period	Peak Demand	Peak Met	Peak Deficit / Surplus	Peak Deficit / Surplus
	(MW)	(MW)	(MW)	(%)
2006-07	14,252	9,638	4,614	32.37
2007-08	13,934	10,130	3,804	27.30
2008-09	13,272	10,203	3,069	23.12
2009-10	13,662	10,919	2,743	20.08
2010-11	14,047	11,917	2,130	15.16
2011-12	14,931	12,841	2,090	14.00
2012-13 (up to Oct 2012)	14,760	13,173	1,581	10.71

The present peak demand of MSEDCL is around 13000 MW; however the availability is around 12000 to 14200 MW. Thus, there is a shortfall of around ~ 100 - 800 MW for which MSEDCL proposes to procure short term power through transparent competitive bidding from other sources including traders at prevailing market rates.

12. Regulatory Framework

a. National Level:

The implementation of the Electricity Act, 2003 (EA 2003) has effected considerable changes in the electricity market. The major changes relevant to working of a distribution company are as under:

- Delicensing of generation;
- Thrust to complete the rural electrification and provide for management of rural distribution by Panchayats, Cooperative Societies, non-Government organizations, franchisees etc
- Provision for license free generation and distribution in the rural areas;
- Introduction of open access in transmission and distribution;
- Introduction of parallel license – exclusivity of distribution license removed;
- SERC is a mandatory requirement ;
- Provision for payment of subsidy through budget by State Government;
- Issues concerning theft and losses in the system;

The provisions of the EA2003 mentioned above, have far reaching implications for the power sector. It is evident from the above provisions that the EA2003 intends to create a competitive power sector in the long term and has left no choice for the state utilities but to improve their performance to face the competition from other players entering into the market.

Also, in line with Electricity Act 2003, the National Electricity Policy outlines a plan for rural electrification, increased generation capacity, generation mix to be adopted for clean environment, improvement in grid for better transmission and distribution of power. It also calls for the use of the most efficient technologies and more funding for R&D. Finally, the Policy emphasizes the need for conservation and demand-side management including a national awareness campaign. In line with the above policy, the distribution company has to undertake activities to be more competitive as well as to abide by the policy guidelines. The policy aims at improving efficiency, financial availability of the sector, availability of power and protection of customer interest.

The National Tariff Policy deals with various parameters with respect to the fixation of tariffs, like providing adequate return on investment to the power generator and supplier and ensuring reasonable user charges for the consumers. it provides uniform guidelines to the SERC for the fixation of tariffs for their respective entities. The policy states that the distribution licensee should, in future, procure power solely through competitive bidding which as per the recent guidelines from Ministry of Power is effective from 5th January 2011.

13. SWOT Analysis

Before outlining the Business Plan for any company, it is very important for the organisation to introspect to identify its strength and weaknesses and assess the external environment to outline opportunities and threats. Accordingly, it is very important to evaluate the environment – both internal and external while charting out its growth path and the same has been outlined below.

	Helpful *In achieving the objective*	**Harmful** *In achieving the objective*
Internal Origin Attributes of the Organisation	**STRENGTHS** ✓ Experienced Manpower ✓ Technical expertise ✓ Largest distribution utility ✓ Healthy growth in sales ✓ Novel initiatives for performance improvement ✓ Wide Spread Network	**WEAKNESS** ✓ Uncertain Regulatory Environment ✓ Delay in dispensation of Orders ✓ Non Consideration of Legitimate Expenses ✓ Reversal/Modifications of SERC Orders at Appellate Authorities ✓ Tariffs unable to recover expenditure
External Origin Attributes of the Environment	**OPPORTUNITIES** ✓ Joint Ventures ✓ Distribution Franchisee ✓ Non conventional energy ✓ Developing power market ✓ CDM benefits ✓ Ancillary Services ✓ Infrastructure upgradation ✓ Load Management ✓ Competitive Bidding	**THREATS** ✓ Non Discriminatory Open Access mandatory ✓ Parallel License ✓ Regulatory Risk & inconsistencies ✓ Township and Deemed license to SEZ developers ✓ High Sensitivity to Operational Variations

14. Market Issues and Challenges

A number of market related issues and challenges are expected to create uncertainty in the power distribution business environment and therefore require the appropriate reactive measures. The power distribution business environment would throw up a number of market-related issues and challenges which needs to be evaluated by MSEDCL.

Open Access: mandated to provide non-discriminatory open access which may result in loss of subsidizing consumers.

Parallel license: As per the Act, a parallel licensee is possible to be operated whereby two licensees are supplying power in the same specified area. Currently, due to

recent clarification from MoP and Ministry of Commerce, SEZ became the Distribution Licensee for the SEZ area whereby company is supplying power. Also, other companies may get an approval of being a distribution licensee to supply power in the specified area of Company which is more prevalent in urban areas due to low losses and are marked by the non-existence of agriculture consumers.

Regulatory provisions – Being into a regulated environment, have to follow the regulatory framework and directions by the appropriate commission.

Industry Risk and Competition: A competition from the other private sector player due to opening of power sector will result into a risk of losing of subsidising consumers.

Scarcity of Financial Resources

In last five years, MSEDCL has accumulated a deficit of around more than Rs. 3800 Crores and is facing a difficult financial situation. This has resulted into increase in working capital requirements due to number of factors like lower tariff, delayed tariff Order and revenue gaps of earlier years pending for true up. Thus, there is challenge for MSEDCL on recovery of costs and ROE, in the present scenario

Renewable Purchase Obligation (RPO): SERC mandates the distribution licensee to purchase electricity from renewable sources, a percentage of the total consumption of electricity in the area of a distribution licensee. This step is considered to promote the generation from such renewable sources and can have a minimum impact on the environment.

Impact of DSM Regulations: Demand Side Management (DSM) is described as the planning, implementation and monitoring of utilities activities designed to encourage customers to amend their electricity consumption patterns, both with respect to timing and level of electricity demand so as to help the customers to use electricity more efficiently. Every Distribution Licensee has to implement the DSM measures as an integral part of their day-to- day operations. Many SERCs and Discoms have already introduced some DSM programs. Experience suggests that the

skills of discom staff, and the priority accorded to it by Discom management, are important for its success. DSM incentives need to be carefully designed and targeted so that the appropriate load curve changes are realized.

Intra-State ABT implementation – UI Implication: UI at intra-state level due to deviation in schedule and actual will make each DISCOM accountable. A proper planning and scheduling of power along with implementation of SCADA is required to have efficient distribution system.

Cost to serve against average Realization: With the advent of the Electricity Act 2003 and various policy initiatives thereof, it has now become mandatory for the Electrical utilities to gradually reduce the cross subsidy and move the tariffs in the State towards the "Cost of Supply". The tariff of the consumers needs to progressively move towards the cost of supply of electricity and reduces the cross subsidies within the category of consumers. This has to be achieved by all the Distribution Utilities in India which is considered to be a major challenge for SERC and Utilities.

Market Penetration and service area: The widespread distribution network and the retail reach of such infrastructure would be key discriminators of a licensee's market position.

Standards of Performance (SOP's)

Supply distribution licensee shall be the sole interface to the consumer and therefore responsible for adherence to SoP relating to the period of giving supply, quality of supply (voltage, harmonics), system of supply, restoration of supply, restoration in burnt meter cases, reconnection on payment of amounts due. In order to provide non-discriminatory access to the wires, the wheeling distribution licensee should not discriminate between changed-over consumers and its own consumers for provision of wheeling services.

Future Market Operations and Financial positions

The future assessment is based on the aspects in the business environment including

the regulatory stance, changing market conditions, differential growth rates of various consumers, tariff levels and growth orientation, all of which would translate into the financial projections and performance.

15. Risk Analysis and Mitigation Plans

It is necessary to understand that how the risks are perceived by the business. Virtually all organisations strive to survive. They strive to create value for their stakeholders including State Government, SERC, Consumers, Financial institutions, etc. The risk can be identified as a financial risk, regulatory risk, operating risk, technology risk, etc.

a. To reduce shortage of power

One of the major problems being faced by MSEDCL is the lack of availability of adequate power for meeting its demand requirements. The peak deficit in MSEDCL licensed area is around 100 to 800 MW and in near future MSEDCL will be in surplus.

b. Improve Efficiency:

In order to be competitive in the distribution segment, MSEDCL has to improve operational efficiency. The efficiency can be achieved through reduction of losses, quality power supply and up gradation of network.

c. Improvement in Consumer Services:

Due to inclusion of Open Access and Parallel License under the amended Electricity Act 2003, a consumer of MSEDCL will always have a choice to avail supply of electricity from any Distribution Licensee other than MSEDCL, providing better service and continuous power supply at cheaper rates. Therefore, a constant improvement in Consumer service will be required to avoid chances of losing the consumers.

d. Project Management and Execution:

A key element of the implementation of infrastructure plan is to execute project on a timely manner and is managed in a judicious way. To meet the investment objectives & improving the existing infrastructure of Distribution System, MSEDCL needs to review the timely implementation and completion of Infrastructure plan.

e. Recovery of Arrears:

Even though MSEDCL has a collection efficiency of near 100%, still there are huge old arrears which need to be targeted and collected.

f. Regulatory awareness:

Regulatory risks will have to be proactively dealt with to minimise the impact on Company as well as Consumer Interest and therefore a capacity building is required to provide training to the employees for creating awareness related to regulatory provisions.

16. Operational Plan

a. Capex and Capitalisation

Capital expenditure and capitalisation of MSEDCL from FY 2011-12 to FY 2015-16 is summarized below.

Rs. Crs

Particulars	FY 2011-12 (Actual)	FY 2012-13 (Estimated)	FY 2013-14 (Projected)	FY 2014-15 (Projected)	FY 2015-16 (Projected)
Capex	6,636	5,316	5,478	3,900	2,388
Capitalisation	6,769	7,398	5,876	4,262	2,781

b. Sales Projection

Based on the CAGRs of historical sales and actual sales up to December 2012, MSEDCL has projected the sales for FY 2012-13 to FY 2015-16.

MUs

Particulars	FY 2011-12 (Actual)	FY 2012-13 (Estimated)	FY 2013-14 (Projected)	FY 2014-15 (Projected)	FY 2015-16 (Projected)
HT Category	30,368	31,136	35,771	38,826	42,151
LT Category	44,265	45,356	49,615	53,648	58,098
MSEDCL Sales	**74,632**	**76,492**	**85,386**	**92,474**	**100,249**
DF (Category wise)	5,500	5,878	6,466	7,021	7,626
MSEDCL Total Sales	**80,132**	**82,370**	**91,851**	**99,495**	**107,875**

c. Distribution Loss

MSEDCL has been achieving a significant reduction in distribution losses, during recent years. It is assumed that the distribution loss during the Control Period will reduce by 0.50% per year. Projection of distribution losses for the Control Period is shown in following table:

Particulars	FY 2011-12 (Actual)	FY 2012-13 (Estimated)	FY 2013-14 (Projected)	FY 2014-15 (Projected)	FY 2015-16 (Projected)
Distribution Loss	16.03%	15.53%	15.03%	14.53%	14.03%

d. Power Purchase

Considering the Long Term PPAs and expected performance along with the likely rise in fuel price due to coal pooling policy, MSEDCL has prepared three scenarios for power purchase. The summary of power purchase quantum as well as cost including average power purchase cost under various scenarios is tabulated below:

Scenarios	FY 2011-12 (Actual)			FY 2012-13 (Estimated)			FY 2013-14 (Projected)			FY 2014-15 (Projected)			FY 2015-16 (Projected)		
	MUs	Rs. Crs	Rs./kWh	MUs	Rs. Crs	Rs./kWh	MUs	Rs. Crs	Rs./kWh	MUs	Rs. Crs	Rs./kWh	MUs	Rs. Crs	Rs./kWh
Realistic	98,662	32,921	3.34	101,746	35,869	3.53	115,437	42,685	3.70	144,779	57,058	3.94	162,008	67,085	4.14
Pessimistic							114,613	45,075	3.93	133,850	56,640	4.23	151,537	67,960	4.48
Optimistic							120,540	44,551	3.70	152,190	59,709	3.92	166,781	68,953	4.13

e. Average Cost of Supply

The Table below shows projection of Average Cost of Supply by MSEDCL under MYT second control period FY 2011-12 to 2015-16 under various scenarios.

Scenarios	Particulars	FY 2011-12 (Actual)	FY 2012-13 (Estimated)	FY 2013-14 (Projected)	FY 2014-15 (Projected)	FY 2015-16 (Projected)
Realistic	ARR (Rs. Crs)	41,976	47,498	57,797	67,078	75,859
	Sales (MUs)	80,132	82,370	91,851	99,495	107,875
	AVCoS (Rs./kWh)	5.24	5.77	6.29	6.74	7.03
Pessimistic	ARR (Rs. Crs)	41,976	47,498	60,449	69,878	79,875
	Sales (MUs)	80,132	82,370	91,851	99,495	107,875
	AVCoS (Rs./kWh)	5.24	5.77	6.58	7.02	7.40
Optimistic	ARR (Rs. Crs)	41,976	47,498	58,116	67,332	76,093
	Sales (MUs)	80,132	82,370	91,851	99,495	107,875
	AVCoS (Rs./kWh)	5.24	5.77	6.33	6.77	7.05

MSEDCL submits that MSEDCL has given the Scenario Analysis only for power purchase. In optimistic scenario, MSEDCL has considered an optimistic view and projected higher power availability. Considering the higher power quantum, the resultant power purchase cost in absolute terms also gets increased. However, there is a slight decrease in the power purchase cost per unit in the optimistic scenario. Since other ARR Items such as O&M Costs, Depreciation, Interest and Return on equity etc. and sales remain the same, the ARR in Optimistic Scenario gets increased and consequently other items such as Provisions for Bad Debts also gets increased resulting in ARR being higher in Optimistic Scenario.

17. Prayers

MSEDCL respectfully prays to the Hon'ble Commission:

1. To admit the Business Plan for the Distribution Business of the MSEDCL for the Control Period (FY 2013-14 to FY 2015-16) in accordance with Regulation 4.2 and 7.1 of the Maharashtra Electricity Regulatory Commission (Multi Year Tariff) Regulations, 2011.
2. To approve the Business Plan for the Distribution Business of the MSEDCL for the Control Period (FY 2013-14 to FY 2015-16) in accordance with the Regulation 4.2 and 7.1 of the MERC (MYT) Regulations, 2011.
3. To approve the principles and methodology proposed by MSEDCL for projection of ARR.
4. To consider the Final Transfer value of the Assets in case the Final Transfer Scheme gets notified during the Control Period and accordingly revise the Business Plan

5. To allow carrying cost for delayed FAC recovery at the time of next tariff determination proceedings
6. To approve the deviation from the norms for certain parameters prescribed in MERC (MYT) Regulations 2011, provisions thereof, as sought in this Business Plan during the period FY 2013-14 and FY 2015-16.
7. To pass any other order as the Hon'ble Commission may deem fit and appropriate under the circumstances of the case and in the interest of justice.
8. To condone any error/omission and to give opportunity to rectify the same.
9. To permit MSEDCL to make further submissions, addition and alteration to this Business Plan as may be necessary from time to time.