

Ref No: MEGPTCL/MERC/09112013

The Principal Secretary,
Maharashtra Electricity Regulatory Commission,
World Trade Centre, Centre No. 1,
13th Floor, Cuffe Parade,
Colaba, Mumbai 400 005.

Subject: Submission of Business Plan for Maharashtra Eastern Grid Power Transmission Limited (MEGPTCL) in accordance to Regulation 7 read with Regulation 57 of Maharashtra Electricity Regulatory Commission (Multi-Year Tariff Petition) Regulations, 2011

Dear Sir

In accordance with Regulation 7 read with Regulation 57 of Maharashtra Electricity Regulatory Commission (Multi-Year Tariff) Regulation 2011, the Transmission Licensee is required to submit its Business Plan for Control Period from FY2011-12 to FY2015-16 for the scope of works mentioned under Transmission License.

In line with the requirements, MEGPTCL filed its petition for approval of Business Plan on 23rd September 2013. Subsequently, the Hon'ble Commission communicated identified Data gaps vide emails dated 24th October 2013 and 28th October 2013. MEGPTCL had submitted its responses to the said Data gaps on 31st October 2013. Technical Validation Session (TVS) was held on 31st October 2013. Thereafter, the Petitioner received Data gaps Set 3 on 07th November 2013 and submitted its response on 08th November 2013.

On 08th November 2013, the Hon'ble Commission issued Minutes of Meeting (MoM) for TVS dated 31st October 2013 and directed the Petitioner to submit revised Petition. In compliance, the Petitioner is submitting the revised Petition for MYT second control period (FY 2013-14 to 2015-16) taking into account the Data gaps issued by the Hon'ble Commission and our responses to the same.

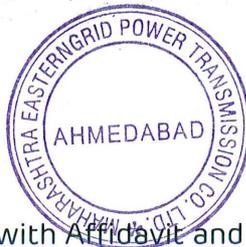
Thanking you

Yours faithfully,

For Maharashtra Eastern Grid Power Transmission Limited

Vh Jadar

(Authorized Signatory)



Encl:

1. Business Plan along with Affidavit and Annexure
2. CD.

**BEFORE THE HON'BLE
MAHARASHTRA ELECTRICITY REGULATORY COMMISSION, MUMBAI**

Filing No. _____
Case No. _____

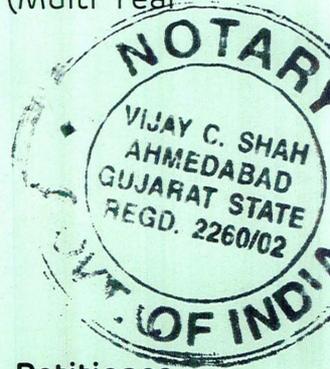
IN THE MATTER OF:

Petition for Approval of Business Plan of Maharashtra Eastern Grid Power Transmission Limited (MEGPTCL / Petitioner) for the Second Control Period from FY 2013-14 to FY 2015-16 under the Provisions of Regulation 7 read with Regulation 57 of the Maharashtra Electricity Regulatory Commission (Multi Year Tariff) Regulations, 2011

AND

IN THE MATTER OF:

Maharashtra Eastern Grid Power Transmission Limited
Adani House,
Near Mithakhali Six Roads,
Navrangpura,
Ahmedabad, Gujarat 380009



-----Petitioner

AFFIDAVIT

I, Vipul Kumar Jadav, S/o Shri Haribhai Jadav, age 44 years, being the Authorized Signatory of Maharashtra Eastern Grid Power Transmission Limited having office at Shikhar, Nr. Mithakhali Six Roads, Navrangpura, Ahmedabad, Gujarat-380009, do hereby solemnly affirm and state as under:

1. I am an Authorized Signatory of Maharashtra Eastern Grid Power Transmission Limited, the petitioner in the above matter, and I am duly authorized and competent to make this affidavit.
2. The statements made in the petition are true to my knowledge and belief and statements made in paragraphs therein are based on information and I believe them to be true.
3. I say that there are no proceedings pending in any court of law / tribunal or arbitrator or any other authority, wherein the petitioners are a party and where issues arising and / or relief sought are identical or similar to the issues arising in the matter pending before the Commission.

VhJadav
(DEPONENT)

VERIFICATION:

Solemnly affirm at Ahmedabad on this 9th day of November, 2013 that the contents of the above affidavit are true to my knowledge and belief and no part of it is false and nothing material has been concealed there from.

S. No. 6784 2013

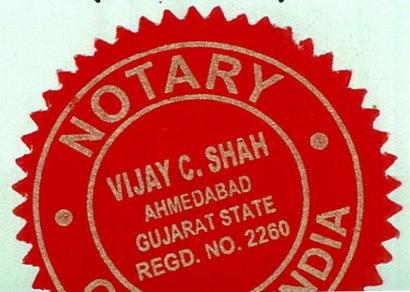
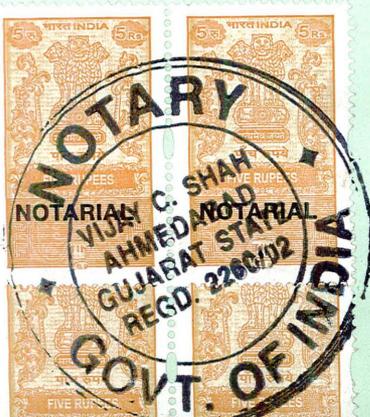
v.c.s
VIJAY C. SHAH
NOTARY
GOVT. OF INDIA

VhJadav
(DEPONENT)

**SOLEMNLY AFFIRMED
BEFORE ME**

v.c.s
VIJAY C. SHAH
NOTARY
GOVT. OF INDIA

59 NOV 2013



BEFORE THE MAHARASHTRA ELECTRICITY REGULATORY COMMISSION, MUMBAI

Filing No. _____

Case No. 128 of 2013

IN THE MATTER OF

Petition for Approval of Business Plan of Maharashtra Eastern Grid Power Transmission Limited (MEGPTCL/ Petitioner) for the Second Control Period from FY 2013-14 to FY 2015-16 under the Provisions of Regulation 7 read with Regulation 57 of the Maharashtra Electricity Regulatory Commission (Multi Year Tariff) Regulations, 2011

AND

IN THE MATTER OF

Maharashtra Eastern Grid Power Transmission Limited

A company registered under the Companies Act, 1956, having its registered office at

Adani House, Near Mithakhali Six Roads, Navrangpura, Ahmedabad, Gujarat 380009

Facts of the Case

Maharashtra Eastern Grid Power Transmission Limited (hereinafter referred to as "MEGPTCL" or "the Petitioner"), files this petition for approval of Business Plan pertaining to the Multi Year Tariff (MYT) Second Control Period from FY 2013-14 to FY 2015-16, for its Licensed Transmission Business under the Transmission License No. 1 of 2010 granted by the Hon'ble Maharashtra Electricity Regulatory Commission.

In compliance with the provisions of MERC (MYT) Regulations, 2011 & MERC (Conduct of Business) Regulations, 2004, the Petitioner filed petitioner for approval of Business Plan on 23.09.2013. Subsequently, the Hon'ble Commission communicated identified Data gaps vide emails dated 24.10.2013 and 28.10.2013. The Petitioner submitted responses to the said Data gaps on 31.10.2013. Technical Validation Session was held on 31.10.2013. Thereafter, the Petitioner received Data gaps Set 3 on 07.11.2013 and submitted its response dated 08.11.2013.

On, 08.11.2013, the Hon'ble Commission issued Minutes of Meeting (MoM) for TVS dated 31.10.2013 and directed the Petitioner to submit revised Petition. In compliance, the Petitioner is submitting the revised Petition for MYT second control period (FY 2013-14 to 2015-16) taking into account Data gaps issued by the Hon'ble Commission and our responses to the same.

Submission/Ground in support of the case

In view of the facts stated above, the Petitioner is submitting this revised Business Plan under the provisions of Regulation 7 read with Regulation 57 of the Maharashtra Electricity Regulatory Commission (Multi Year Tariff) Regulations, 2011, under affidavit, as required under MERC (Conduct of Business) Regulations.

Prayers

The present petition is submitted by the Petitioner to the Hon'ble Commission for approval of Business Plan for Transmission business of the Company under MYT Second Control Period from FY 2013-14 to FY 2015-16. In view of the above facts and circumstances, the Petitioner prays to the Hon'ble Commission that it may be pleased to:

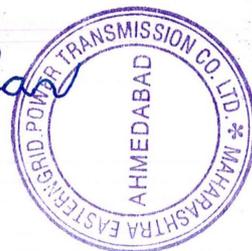
- a) Admit this petition of the Petitioner for approval of Business Plan for the MYT Control period from FY 2013-14 to FY 2015-16 submitted herewith.
- b) Approve the Business Plan for the MYT Control Period from FY 2013-14 to FY 2015-16 along with the relevant operational and financial parameters as proposed in this petition.
- c) Pass suitable orders with respect to the Business Plan for the MYT Control Period from FY 2013-14 to FY 2015-16 as proposed by the Petitioner in this petition along with the relevant operational and financial parameters as proposed in the petition.
- d) Permit the Petitioner to propose suitable changes to the Business Plan, as may be required, prior to the final approval by the Hon'ble Commission.
- e) Pass such further orders, as the Hon'ble Commission may deem fit and appropriate keeping in view the facts and circumstances of the case.
- f) Condone any inadvertent omissions/errors/shortcomings and permit the Petitioner to add/change/modify/alter this filing and make further submissions as may be required at a future date.

For Maharashtra Eastern Grid Power Transmission Limited

Place: AHMEDABAD

Date: 09.11.2013

Vh Jadav
Vipul Jadav



**Maharashtra Eastern Grid Power Transmission Limited
(Licensed Transmission Business)**

**Business Plan for the second Control Period
(FY 2013-14 to FY 2015-16)**

**Submitted to
Hon'ble Maharashtra Electricity Regulatory Commission
Mumbai**

**Submitted by
Maharashtra Eastern Grid Power Transmission Limited**



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Strategic Plan

The Strategic Plan covers aspects such as Company Profile, Human Resource Development Plan, Market Assessment, SWOT Analysis, Risk Analysis and Risk Mitigation Plans and other Environmental and Social Responsibility initiatives.

Chapter 1.: Company Profile

- 1.1. Maharashtra Eastern Grid Power Transmission Company Limited (MEGPTCL/ Petitioner) is a company formed with a specific purpose of development of 765kV intra-state transmission system comprising 2 x 765kV S/C Tiroda – Koradi III – Akola II– Aurangabad (MSETCL) transmission lines along with associated substations & bays (hereinafter referred to as 765kV Transmission System) for evacuation of power from upcoming generation projects in north-eastern Maharashtra.
- 1.2. The Petitioner was incorporated under Companies Act, 1956 as on February 15, 2010.

Formation of MEGPTCL

- 1.3. Maharashtra is facing acute shortage of power. To overcome the prevailing power deficit conditions and to cater to increase in load growth, additional generation capacity of the order of 20000 MW will be required in the State within next four to five years. Generation capacity totalling to 8130 MW is being added by FY 2014 from coal based thermal generation plants coming up in the north-eastern part of Maharashtra in the districts of Nagpur, Gondia and Amravati. To evacuate power from the generation plants, the STU has planned intra-State transmission system in Maharashtra state based on System Studies in coordination with CEA and PowerGrid. The Petitioner has been formed for the specific purpose of development of 765 kV Transmission System which will evacuate power from the generation projects in north-eastern Maharashtra.
- 1.4. The Petitioner had made an application before the Honourable Commission on 18th February, 2010 for grant of transmission license for construction, operation and maintenance of the 765kV Transmission System identified by the State Transmission Utility in its STU Network Plan for 2010-11 to 2014-15. Considering all the submissions made by the Petitioner, the Honourable Commission granted transmission license (License No. 1 of 2010) dated 21st September 2010 to the Petitioner vide its Order dated 14th September 2010. The transmission licence authorised the Petitioner to establish and operate the following transmission lines, substations bays and equipments inclusive of related infrastructure.

(a) Transmission lines

- (i) Tiroda – Koradi-III 765 KV S/C Line-1 (120 km)
- (ii) Koradi-III – Akoka-II 765 KV S/C Line-1 (270 km)
- (iii) Akola-II – Aurangabad 765 KV S/C Line-1 (240 km)
- (iv) Tiroda – Koradi-III 765 KV S/.C Line-2 (120 km)
- (v) Koradi-III – Akoka-II 765 KV S/C Line-2 (270 km)
- (vi) Akola-II – Aurangabad 765 KV S/C Line-2 (240 km)
- (vii) Akola-II – Akola-I 400 KV Quad D/C Line (30km)

(b) Substations

- (i) Establishment of 765/400 KV switchyard at Tiroda
- 1x1500 MVA, 765/400 KV transformer with bays on either side (4x500 MVA 1 ph units providing 1x1500 MVA bank with one spare unit)
 - 2 nos. of 765 KV line bays (For Tiroda – Koradi-III, 2xS/C 765 KV lines)
 - 2x240 MVAR, 765 KV switchable line reactors (7 x 80 MVAR 1 ph units providing 2x240 MVAR banks with one spare unit for Tiroda – Koradi-III, 2xS/C 765 KV lines)
 - Space of 1 number 765 KV bay (for future use)
- (ii) Establishment of 765/400 KV substations at Koradi-III
- 2x1500 MVA, 765/400 KV transformers with bays on either side (7x500 MVA 1ph units providing 2x1500 MVA bank with one spare unit)
 - 4x240 MVAR, 765 KV switchable line reactors. (14x80 MVAR 1 ph units providing 4 x 240 MVAR banks with two spare units for Tiroda – Koradi-III and Koradi-III – Akola-II 2xS/C 765 KV lines)
 - 1x240 MVAR, 765 KV switchable bus reactors. (4x80MVAR 1 ph units providing 1x240 MVAR banks with one spare unit)
 - 4 nos. of 765 KV line bays (for Tiroda – Koradi-III and Koradi-III – Akola-II 2xS/C 765 KV lines)
 - 4 nos, of 400 KV line bays (for Koradi-III – Koradi-II and Koradi-III – Khaperkheda D/C 400 KV lines)
 - Space for 2 nos of 765 KV line bays (for future use)
 - Space of 2 nos of 400 KV line bays (for future use)
- (iii) Establishment of 765/400 KV substations at Akola-II
- 1x1500 MVA, 765/400 KV transformers with bays on either side (4x500 MVA 1 ph units providing 1x1500 MVA bank with one spare unit)
 - 2x240 MVAR, 765 KV switchable line reactors (7x 80 MVAR 1 ph units providing 2x240 MVAR banks with one spare unit for Akola-II - Aurangabad, 2xS/C 765 KV lines)
 - 2x240 MVAR, 765 KV fixed line reactors (7x80 MVAR 1 ph units providing 2x240 MVAR banks with one spare unit for Koradi-III – Akola-II, 2xS/C 765 KV lines)
 - 1x240 MVAR, 765 KV switchable bus reactor (4x80 MVAR 1 ph units providing 1x240 MVAR banks with one spare unit)
 - 4 nos of 765 KV line bays (for Koradi-III – Akola-II and Akola-II – Aurangabad 2xS/C 765 KV lines)
 - 4 nos of 400 KV line bays (2 nos for Akola-II – Akola-I 400KV quad D/C line and 2 nos for Nandgaonpet – Akola-II 400KV D/C line)
 - Space for 2 nos of 765 KV line bays (for future use)
 - Space for 2 nos of 400 KV line bays (for future use)

- (iv) Extension of 765 KV Aurangabad substation
- 2x240 MVAR, 765 KV fixed line reactors (7x80 MVAR 1 ph units providing 2x240 MVAR banks with one spare unit for Akola-II – Aurangabad 2xS/C 765 KV lines
 - 2 nos of 765 KV line bays (for Akola-II – Aurangabad 2xS/C 765 KV lines)

- 1.5. In line with GoI Policy for encouraging private sector participation in transmission and other precedents such as establishment of Jaigad Power Transco Ltd., (a JV of MSETCL and JSW Energy), Adani Enterprises Limited (AEL) proposed MSETCL to undertake development of the 765kV system as outlined in the STU Network Plan for 2010-11 to 2014-15 in Joint Venture (JV) with equity participation of 74:26 respectively and the Petitioner was intended to be a JV participation of 74% and 26% respectively on Build Own and Operate (BOO) basis. Accordingly, MSETCL Board accorded in-principle approval for formation of JV.
- 1.6. However, in view of pending approval from GoM for MSETCL's participation in the JV, AEL secured 'No Objection' certificate from MSETCL to proceed with development of the project, in the interest of time, with an obligation to arrange for additional 26% equity contribution in the Petitioner in case of delay or non-receipt of GoM approval for 26% equity investment by MSETCL in JV. The Hon'ble Commission had noted the same in its Order in Case No. 118 of 2009 issued on 14th September, 2010.
- 1.7. Subsequently, on December 27, 2012, MSETCL informed AEL, with copy to Hon'ble Commission vide letter No. MSETCL/CO/C&M/Contracts-V/JV/MEGPTCL/17787, of its decision not to enter into JV with AEL in MEGPTCL.
- 1.8. However, as per the 'No Objection' certificate, AEL has proceeded with contributing full equity for the Petitioner. MEGPTCL is a wholly owned subsidiary of AEL.
- 1.9. The 4500 MW capacity 765 kV intra-state transmission network being established by the Petitioner is required to evacuate power from the upcoming power generation projects in North Eastern region of Maharashtra. Since the proposed transmission system is forming an integral part of the intra-state transmission network, the Petitioner is entitled to recover monthly transmission charges towards its investment on completion of transmission system, in line with the Commission's Order dated November 13, 2007, based on the tariff approved from time to time.
- 1.10. The construction of the project has progressed considerably, and the Petitioner is soon to commission and put to use the transmission system in parts. In this regard, the Petitioner submits this Business Plan before the Hon'ble Commission for approval in accordance with Regulations 7.1 and 7.2 of the MERC (Multi Year Tariff) Regulations, 2011.

Chapter 2.: Organization Structure

2.1. The Petitioner has prima-facie considered an organization structure suitable for establishing and operating the transmission system under the license. The proposed organization structure is provided below for information to the Hon'ble Commission. However, the Petitioner would firm up the organization structure prior to the commissioning of the transmission system.

Organization Structure for MEGPTCL Transmission Business

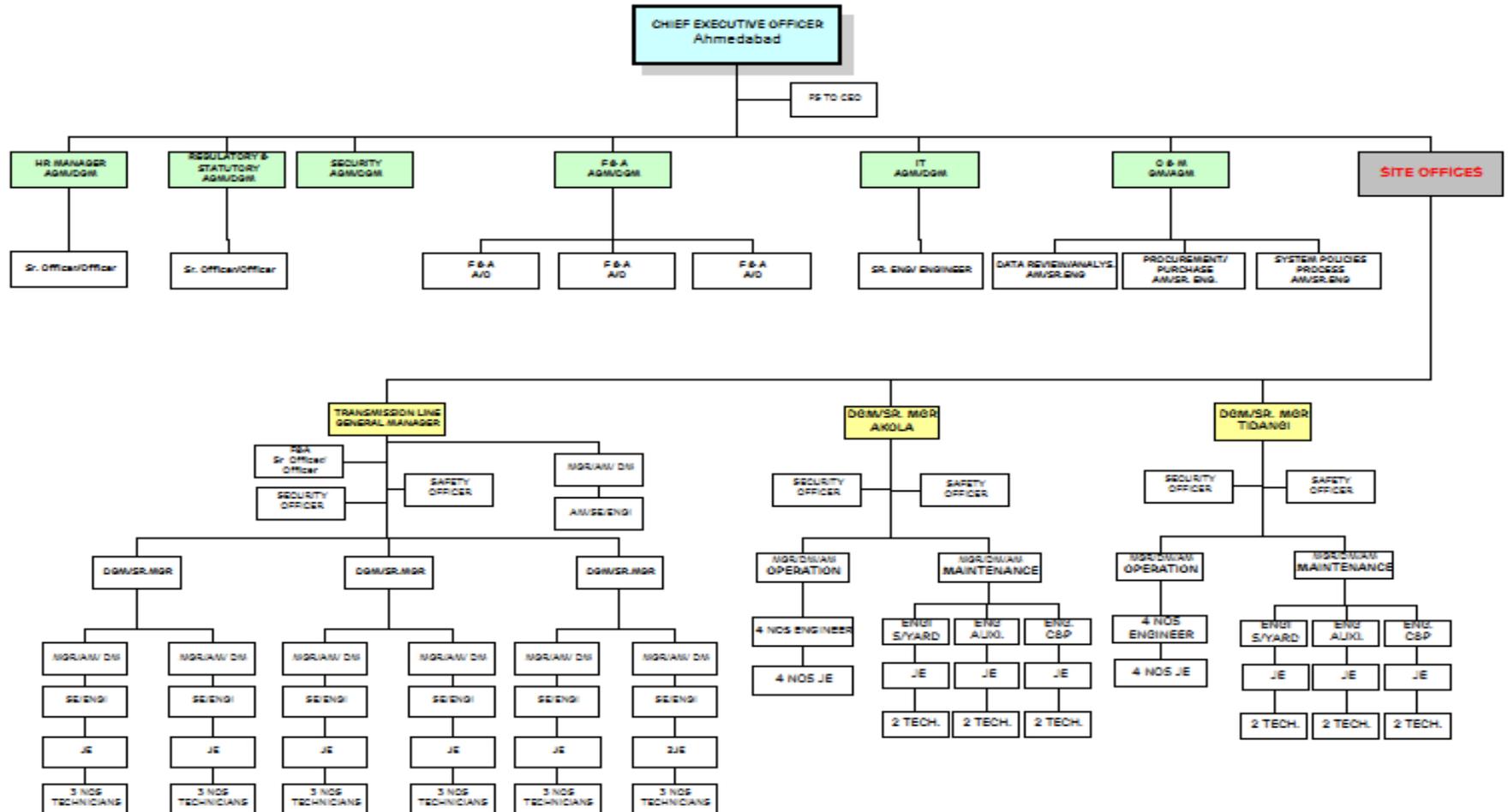


Table 1: Legend of Organisation structure

Legends	
CEO	Chief Executive Officer
PS	Personal Secretary
HR	Human Resources
F&A	Finance & Accounts
IT	Information Technology
O& M	Operation & Maintenance
G M	General Manager
AG M	Assistant General Manager
DG M	Deputy General Manager
Sr. Mgr	Senior Manager
Mgr.	Manager
D M	Deputy Manager
A M	Assistant Manager
Sr. Eng.	Senior Engineer
Eng.	Engineer
AO	Account Officer
JE	Junior Engineer
Tech.	Technician
S/Yard	Switch Yard
Auxi.	Auxiliaries
C&P	Control and Protection

2.2. The Petitioner has 3 Directors on its board. The name of the Directors on the Board of the Company and their details are given below:

Table 2: Directors on Board of the Petitioner

S No	Name	Type of Directorship
1	Mr. Deepak Bhargava	Whole time Director
2	Mr. Juvenil Jani	Director
3	Mr. Ajit Barodiya	Director

Table 3: Details of the Directors on Board of the Petitioner

Name of the Director	Qualifications	Experience
Mr. Deepak Bhargava	B.E.	Mr Deepak Bhargava is a graduate in Electrical Engineering from Jodhpur (Rajasthan). He brings in a variety of experience in the field of EHV Transmission i.e. Transmission Lines and Sub Stations. He has been in this field for around 34 years in assortment of both Public and Private Utilities like Rajasthan State Electricity Board, Powergrid / NTPC, Kalpataru Power Transmission Ltd, KEC international etc. Mr. Bhargava was instrumental role in exploring business opportunities overseas for companies like Kalpataru and played key role in setting up of first 400kV Transmission Line in Algeria and also was responsible for bagging Rs 260 Crore worth of projects in year 2005. At KEC International, Mr. Bhargava managed and executed major international projects. The major portfolio's handled were Business Development, Marketing, production and execution. He is a well known personality in the field of Power Transmission and has been source of Knowledge and Inspiration. Currently, he is heading Power Transmission Business in Adani Group and has been instrumental in setting up EHV Transmission projects of Adani Group in various states.
Mr. Juvenil Jani	C.A, C.S., ICWA	Mr. Juvenil Jani is professionally qualified as a Chartered Accountant, Cost & Management Accountant and a Company Secretary from the Institute of Chartered Accountant of India, Institute of Cost & Works Accountants of India and the Institute of Company Secretaries of India respectively. He is also a qualified Management Accountant from the Institute of Management Accountants of USA. Juvenil joined the Adani Group in December 2004 and currently heads the Finance function

Name of the Director	Qualifications	Experience
		of the business. Earlier, he oversaw the functions of Finance, Accounts, Information Technology, Investors Relations & Secretarial etc. He has over 24 years of work experience. Prior to joining the Adani Group he worked with Shaw Wallace & Co. Ltd., Jumbo World Holdings Limited, and ASK Raymond James & Associates Ltd.
Mr. Ajit Barodia	B.Com	Mr. Ajit Barodia received his Bachelor's degree in Commerce. He joined Adani group way back and worked vastly diverse fields like port, power, SEZs etc. He has rich experience of more than 25 years in corporate affairs and corporate communications.

- 2.3. The Petitioner has leveraged the skill sets of its promoter AEL in seeking advice as well as resources on need basis on project construction and management. In addition, the Petitioner had appointed Lahmeyer International (India) Pvt. Ltd. (LII) as Project Management Consultant.
- 2.4. The EPC works for design, supply, erection, testing, and commissioning of Transmission lines and substations is being executed by a Consortium led by PMC Projects (India) Pvt. Ltd.

Chapter 3.: Description of Business Overview: Operational & Financial

Business Overview – Operational

3.1. The project includes establishing transmission system for evacuation of power from upcoming Thermal Power Stations in the north-eastern part of Maharashtra. The system will comprise of 2x765 kV S/C transmission lines spanning from Tiroda to Aurangabad with intermediate substations at Tiroda, Koradi III, Akola II and Aurangabad. The system also comprises one 400 kV D/C transmission line connecting 400kV Akola-I (MSETCL) Substation with 765/400kV Akola-II (MEGPTCL) Substation. The transmission system has been identified by the STU based on load flow studies.

Table 4: Project highlight

Transmission lines	
Tiroda – Koradi-III 765 KV S/C Line-1	120 km
Koradi-III – Akoka-II 765 KV S/C Line-1	270 km
Akola-II – Aurangabad 765 KV S/C Line-1	240 km
Tiroda – Koradi-III 765 KV S/C Line-2	120 km
Koradi-III – Akoka-II 765 KV S/C Line-2	270 km
Akola-II – Aurangabad 765 KV S/C Line-2	240 km
Akola-II – Akola-I 400 KV Quad D/C Line	30.65 km
Substations	
Establishment of 765/400 KV switchyard	Tiroda
Establishment of 765/400 KV substations	Koradi-III
Establishment of 765/400 KV substations	Akola-II
Extension of 765 KV substation	Aurangabad

Business Overview: Financial

3.2. The Transmission License was granted to the Petitioner on September 21, 2010. Subsequent to grant of license, the Petitioner concluded international competitive bidding for constructing the transmission system and approached the Hon'ble Commission for in-principle clearance of estimated capital cost. The Hon'ble Commission approved in-principle the following total estimated cost of the project comprising transmission lines from Tiroda to Aurangabad, including associated substations to be Rs. 4,721.88 Crs.

Table 5: Summary of in-principle approval of the cost

S No.	Particulars	Basis	Sub-total	Total
			Rs. Crs	Rs. Crs
1	Preliminaries			4.00
2	Transmission lines			2,210.71
2.1	Tiroda - Koradi - Akola - Aurangabad 765kV and Akola I - Akola II 400kV		2,210.71	
3	Substation works			1,946.88
3.1	765kV substations at Koradi III, Akola II and switchyard at Tiroda and extension of Aurangabad substation		1,895.88	
3.2	Land & Compensation		51.00	
	SUB TOTAL 1+2+3			4,161.59
4	Overheads			317.31
4.1	Overheads	4%	166.46	
4.2	Contingency	3%	124.85	
4.3	Pre-operative expenses		26.00	
5	Deposit Work for bays at Aurangabad substation			32.00
6	Financing & IDC			210.98
7	TOTAL			4,721.88

3.3. However, the construction of the project has progressed considerably and the present estimate of the project cost is about Rs. 5290.92 Crores. The detailed explanation of the revised estimates of cost is provided in the Operational Plan of this Business Plan.

Chapter 4.: Key Activities Completed

- 4.1. In the Order in Case 118 of 2009 granting transmission licence to the Petitioner, the Hon'ble Commission directed the Petitioner to submit its application for approval of capital expenditure schemes and Petition for approval of Annual Revenue Requirement in accordance with Tariff Regulations of MERC. Also, in the same Order, the Hon'ble Commission directed the Petitioner to construct the transmission system through competitive procurement basis.
- 4.2. The Petitioner conducted an international competitive bidding for selection of contractors for design, supply, erection, testing, and commissioning of 2 Nos 765kV S/C Tiroda – Koradi III – Akola II – Aurangabad Transmission lines and 400kV D/C Akola I – Akola II Transmission line, complete in all respects with all fittings and accessories as per Technical Specifications for evacuation of power from north eastern part of Maharashtra. Since price offer of the Consortium led by PMC Projects (India) Pvt. Ltd. was the lowest, Letter of Intent was awarded to it for execution of the project.
- 4.3. Further, the Petitioner conducted an international competitive bidding for selection of contractors for design, supply, erection, testing, and commissioning of 765kV Substations including all equipment, Auto transformers & Shunt Reactors associated with 2 Nos S/C 765 kV Tiroda-Koradi III-Akola II- Aurangabad Transmission System and 400 kV D/C Akola I – Akola II Transmission Line, complete in all respect with all fittings and accessories as per Technical Specifications for evacuation of power from north eastern part of Maharashtra. Since price offer of the Consortium led by PMC Projects (India) Pvt. Ltd. was the lowest, Letter of Intent was awarded to it for execution of the project.
- 4.4. The Petitioner invited tenders to appoint a Consultant for providing Project Management Consultancy (PMC) Services for their 765kV/ 400kV Transmission project for evacuation of Power from various Power Projects situated in north-eastern Maharashtra. Since price offer of Lahmeyer International (India) Pvt. Ltd. (LII) was the lowest, Letter of Intent was issued to it.
- 4.5. The Petitioner has complied with the provisions contained in the Electricity Act, 2003 and the rules made there-under and the Electricity (Supply) Act, 1910 and 1948, in so far as they are applicable.
- 4.6. The status of regulatory and Government approvals is as below:
 - a) Transmission License [Licence No. 1 of 2010] was granted by the Hon'ble Commission on September 21, 2010.
 - b) Government of Maharashtra has accorded approval under Section 68 of Electricity Act 2003 on December 20, 2010 for construction of transmission line.
 - c) Government of Maharashtra has accorded approval under section 164 of Electricity Act 2003 on June 13, 2011.
- 4.7. Progress of implementing the proposed transmission system as on May 21, 2013 is as followed.

Table 6: Progress of implementation of Lines (in % completed)

S No	Particulars	Line 1	Line 2	Akola I-Akola II line
1	Foundation	99.0	86.4	100.0
2	Erection	97.5	43.8	100.0
3	Stringing	82.2	2.10	100.0

Tiroda 765kV Substation:

- a) Engineering : 100% Completed
- b) Civil work : 100% completed
- c) Supply : 99.5% completed
- d) Installation: 100% completed
- e) Overall Progress : 98% completed

Koradi III 765kV Substation:

- a) Land has been identified; land acquisition is in progress
- b) Engineering: 91% completed. Major Equipment/Structure Engineering Completed
- c) Supply: 86% completed
- d) Civil work: 14% completed
- e) Overall Progress: 44% completed

Akola II 765kV Substation:

- a) Engineering: 100% Completed
- b) Supply: 100% completed
- c) Civil work: Major work related to commissioning 100% completed
- d) Installation: 100% completed
- e) Testing and Commissioning: 98% Completed
- f) Overall Progress: 98.4% completed

Chapter 5.: Human Resource Development Plan

- 5.1. The Petitioner is a dynamic vertical of AEL, which is an exponentially growing integrated infrastructure business enterprise in India. It has built a portfolio of infrastructure assets, in terms of ports, power, water and transportation. It is working towards becoming a globally admired leader in integrated infrastructure businesses with a deep commitment to nation building. It aspires to be known for its scale of ambition, speed of execution and quality of operation.
- 5.2. The Petitioner intends to employ a young & dynamic team, with experienced & enthusiastic employees determined to accomplish the vision of becoming a world class organization in the Power Sector. Its business philosophy is based on four core values – Customer focus, Operational excellence, Product leadership & People. The Petitioner believes that the ultimate identity and success of its business will reside in the exceptional quality of its people and their extraordinary efforts. For this reason, it is committed to hiring, developing, nurturing, motivating & retaining the best people in the industry.
- 5.3. The Human resource department of the Petitioner has four main verticals namely:
- a) Operations
 - b) Talent Acquisition
 - c) Training and Development
 - d) Business Partner
- 5.4. The HR function in the organisation will be driven by the following major processes with a view to talent acquisition, development and retention.
- a) Analysis of individual needs
 - b) A strong performance management system
 - c) Training need identification
 - d) Manpower planning backed by competitive recruitment policy
 - e) Performance recognition and reward policy

Analysis of the needs

- 5.5. The company presently requires manpower at different stages of Projects, Commissioning and Operation & Maintenance. Therefore, to meet the Corporate Objective and Business Plans, the Company has chalked out manpower planning along with optimum utilization of its existing manpower. The systematic projections of manpower requirements based on realistic projections and standard of performance has been worked out.

5.6. Operations vertical has specific areas of expertise and focus which are mentioned in the table below:

Table 7: Areas of Operations vertical of HR department

Ongoing	Periodic	Annual
Organisation Structure	Performance Management	Individual Development Plan
Roles and Responsibilities	Mid-Year Assessment	
Job Evaluation and Job Description	Annual Assessment	
Compensation and Benefits		

Recruitment policy

5.7. In a sector where the Talent Pool is very scarce and is primarily available with central/state and selected private power utilities in the country, the Petitioner inducts new hires and puts maximum efforts to retain existing talents. This is in sync with the business requirements of the Petitioner. The innovative and pre-emptive approach helps the organization meet the requirement of appropriate manpower in time.

5.8. The Talent Acquisition policy of the Company concentrates on manpower budgeting, recruitment, selection and on-boarding. Today with a strong employer brand, competitive compensation, employee focused benefits and open communication, the Company offers a rewarding and exciting Career to its employees.

Development plan

5.9. The Training and Development team is responsible for the individual employee's professional growth and development. The process includes the identification, facilitation and monitoring of all behavioural and technical training requirements within the company. The team administers and monitors the specific and generic training needs within the company and designs applicable competency based training modules. For specific training needs, competent vendors and outsourcing partners are identified, assessed and selected for training. The entire training function is designed based on optimum use of allocated budget and resource. Module effectiveness, participant feedback and necessary course corrections are continuously monitored by the team.

5.10. The company will undertake various learning and development initiatives which will include developing internal trainers, organizing high end training programs (both technical and behavioural) involving faculties from the best institutes in the country, nominating employees for external programs, developing customized modules in collaboration with Adani Institute of Infrastructure Management (AIIM), to align the individual needs with business objectives.

5.11. The Petitioner lays a lot of emphasis on the culture of open communication and knowledge sharing for which open houses, mentor-

mentee relationships and libraries are nurtured. The company has a deep rooted belief that employee engagement is a key business driver for organization success.

Reward policy

- 5.12. The performance appraisal system at the Petitioner links compensation rewards directly to the employee performance. The Petitioner's value system is supported by an environment which is rewarding and recognizing the performance of its employees.
- 5.13. The Petitioner rewards its employees for referring candidates for a suitable opportunity in the organization through the reward and recognition schemes.

Chapter 6.: Market Assessment

Statutory and Regulatory Framework

Overview

- 6.1. The achievement of generation addition target in the 12th Five Year Plan would require an expansion of the regional transmission network and enhancement of inter-regional capacity to transmit power. The latter is required because generation sources are unevenly distributed in the country and power needs to be carried over great distances to areas where load centres exist.
- 6.2. In addition, generation planning is moving toward an all-India basis for optimal development of generation resources. Generation planning studies carried out by the CEA indicate that capacity addition of 100 GW on an all India basis was equivalent to the addition of 113 GW on a regional basis. As a result, transmission planning for regional grids is also moving towards a national concept from a regional concept. The concept has emerged in view of cost economics favouring transmission of electricity over transportation of coal, saving in investment in generation capacity (when planned on all India basis) being more than the additional investment in National Grid and savings on account of diversity in regional demand, sharing of reserves, better utilization of hydro resources and reducing operational cost.
- 6.3. Development of the transmission network has been done in tandem with growth in generation capacity. The growth in transmission system is characterized by the physical growth in transmission network as well as introduction of higher transmission voltages and new technologies for bulk power transmission. Landmark of this growth had been introduction of 220 kV in 1960, 400 kV in 1977, HVDC back-to-back link in 1989, ± 500 kV, HVDC bi-pole line in 1990 and 765 kV operation of 765kV line in 2007 (with Sipat Transmission System). The future growth plan is ± 600 kV, 4000 MW HVDC bi-pole line in 2011 (with Subansiri transmission).
- 6.4. The formation of the National grid is already on the horizon. ER/NER/WR is operating synchronously. With commissioning of Tala transmission system in June 2006, NR is also interconnected to this system synchronously. Towards SR, HVDC interconnections are at Gazuwaka (1000MW), Talcher-Kolar (2000MW) and Chandrapur (1000MW). The goal is to achieve strong and secured National Grid by progressive harnessing of ER/NER resources on all India bases, phased development of cross-regional transmission system and long term perspective to address Right of Way constraints.
- 6.5. The Ministry of Power has issued Guidelines for Competition in Transmission which provides the facilitative framework for seeking proposals from Private Sector through a JV or Independent Power Transmission Company (IPTC) route.
- 6.6. In the JV sphere, we have seen the formation of new transmission companies like Powerlinks Transmission Ltd, Parbati Koldam Transmission Corporation Limited, Sugan Transmission Project Ltd etc. Bids for IPTC projects have also been invited with Reliance Power Transmission Limited emerging successful in the bid for the Western Region Strengthening Scheme (WRSS), Talcher

Augmentation Transmission System & North Karanpura Transmission System; Sterlite Energy Limited emerging successful in the bid for the East-North Interconnection System transmission system;

National Level Regulatory Framework

6.7. The Electricity Act, 2003 as amended in the year 2007 mandates the establishment of the following bodies

- (a) National Load Despatch Centre (NLDC)
- (b) Regional Load Despatch Centre (RLDC)
- (c) State Load Despatch Centre (SLDC)
- (d) Central Transmission Utility (CTU)
- (e) State Transmission Utility (STU)

6.8. Section 62 of the Electricity Act, 2003, empowers the Appropriate Commission to determine tariff, including terms and conditions thereof, for all the matters in the case of supply of electricity by a generating company to a distribution licensee, transmission of electricity, wheeling of electricity and retail sale of electricity. The relevant clause of the Act reads as following–

“The Appropriate Commission shall determine the tariff in accordance with provisions of this Act for –

- (a) *Supply of electricity by a generating company to a distribution licensee: 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;*
- (b) *Transmission of electricity;*
- (c) *Wheeling of electricity;*
- (d) *Retail sale of electricity. ...”*

6.9. The Honourable Commission, while specifying the terms and conditions for the determination of Tariff, is guided by the principles contained in Section 61 of the Electricity Act 2003. Section 61 of the Act stipulates:

“The Appropriate Commission shall, subject to the provisions of this Act, specify the terms and conditions for the determination of tariff, and in doing so, shall be guided by the following namely:

- (a) *The principles and methodologies specified by the Central Commission for determination of the tariff applicable to generating companies and transmission licensees;*
- (b) *The generation, transmission, distribution and supply of electricity are conducted on commercial principles;*
- (c) *The factors which would encourage competition, efficiency, economical use of the resources, good performance and optimum investments;*
- (d) *Safeguarding of consumers' interest and at the same time, recovery of the cost of electricity in a reasonable manner;*
- (e) *The principles rewarding efficiency in performance;*
- (f) *Multi year tariff principles;*

- (g) *That the tariff progressively reflects the cost of supply of electricity and also, reduces and eliminates cross-subsidies within the period to be specified by the Appropriate Commission;*
 - (h) *The promotion of co-generation and generation of electricity from renewable sources of energy;*
 - (i) *The National Electricity Policy and tariff policy"*
- 6.10. In exercise of the powers conferred by the Electricity Act, 2003, the Honourable Commission notified the MERC (Terms & Conditions of Tariff) Regulations 2005 on 23rd August, 2005. This Regulation superseded the MERC (Terms & Conditions of Tariff) Regulations, 2004. Subsequently, the Honourable Commission notified MERC (Multi Year Tariff) Regulations, 2011 which supersedes the MERC (Terms & Conditions of Tariff) Regulations, 2005.
- 6.11. CERC has also notified the Central Electricity Regulatory Commission (Grant of Connectivity, Long-term Access and Medium-term Open Access in inter-State Transmission and related matters) Regulations, 2009 that have changed the manner in which open access applications are made to and handled by the Central Transmission Utility and concerned transmission licensees.

State Level Regulatory Framework

- 6.12. The transmission sector in Maharashtra comprises the SLDC, and transmission licensees, viz MSETCL, Rinfra, Tata Power, JPTL, MEGPTCL, APML, APTCL and SPTCL.
- 6.13. The transmission scenario in Maharashtra is unique mainly due to the pooling concept applied in determining the transmission charges and the existence of many the intra-state transmission companies like Jaigad Power Transco. Ltd (JPTL), Adani Power Maharashtra Limited (APML), Amravati Power Transmission Company Limited (APTCL) and Sinnar Power Transmission Company Limited (SPTCL).
- 6.14. The following two parts discuss the MERC regulations pertaining to multiyear tariff framework, open access and transmission pricing framework.

Part 1: Maharashtra Electricity Regulatory Commission (Multi-Year Tariff) Regulations 2011 for the control period (FY 2011-12 to FY 2015-16)

- 6.15. The MYT Regulations, 2011 is applicable for the determination of tariff in all cases covered under these Regulations from April 1, 2011 to March 31, 2016 for all existing and future Generating Companies, Transmission Licensees and Distribution Licensees and their successors, if any. The Regulations shall be in force from April 1, 2011.
- 6.16. Regulation 3 of the MYT Regulations state that:
- 3.1 The Commission shall determine tariff, including terms and conditions thereof, for all matters for which the Commission has jurisdiction under the Act, including in the following cases:-*
- (i) Supply of electricity by a Generating Company to a Distribution Licensee;*
 - (ii) Intra-State transmission of electricity;*
 - (iii) Rates and charges for use of intervening transmission facilities;*

(iv) Distribution Wires Business of electricity;

(v) Retail Supply Business of electricity:

(vi) Surcharge in addition to the charges for wheeling under the first proviso to sub-section (2) of Section 42 of the Act, in accordance with the Distribution Open Access Regulations and as amended through Orders issued by the Commission from time to time;

(vii) Additional surcharge on the charges for wheeling under sub-section (4) of Section 42 of the Act, in accordance with the Distribution Open Access Regulations and as amended through Orders issued by the Commission from time to time.

....

Provided further that the Commission, while determining tariff upon an application made to it under this Regulation, shall also have regard to the terms and conditions of tariff as may be specified by the State Commission of such other State and/or the terms and conditions of tariff as may be specified by the Central Commission where any of the Parties to such transaction come under the jurisdiction of such State Commission or of the Central Commission.

"The regulations contained in this Part shall apply in determining tariffs for access to and use of the intra-State transmission system of a Transmission Licensee pursuant to a Bulk Power Transmission Agreement or other arrangement entered into with a Transmission System User on or after the date of notification of these Regulations.

Provided that the Commission may deviate from the norms contained in this Part or stipulate alternative norms for particular cases, where it so deems appropriate, having regard to the circumstances of the case..."

6.17. Regulation 4 of the MYT Regulations provides for Multi Year Tariff Framework. The relevant extracts for the same are as follows:

"4.1 The Commission shall determine the tariff for matters covered under clauses (i), (ii), (iii), (iv) and (v) of Regulation 3.1 above under a Multi-Year Tariff framework with effect from April 1, 2011:

....

4.2 The Multi-Year Tariff framework shall be based on the following elements, for calculation of Aggregate Revenue Requirement and expected revenue from tariff and charges for Generating Companies, Transmission Licensee, Distribution Wires Business and Retail Supply Business:

(i) Control Period, before commencement of which a forecast of the Aggregate Revenue Requirement and expected revenue from existing tariff and charges shall be submitted by the applicant and approved by the Commission;

(ii) A detailed Business Plan based on the Operational Norms and trajectories of performance parameters specified in the MYT Regulations, for each year of the Control Period, shall be submitted by the applicant for the Commission's approval;

(iii) Based on the Business Plan, the applicant shall submit the forecast of Aggregate Revenue Requirement and expected revenue from existing tariff for each year of the Control Period, and the Commission shall approve the tariff for

Generating Companies, Transmission Licensee, Distribution Wires Business and Retail Supply Business, for each year of the Control Period;

....

(v) Mid-term review of performance vis-à-vis the approved forecast and categorization of variation in performance as those caused by factors within the control of the applicant (controllable factors) and those caused by factors beyond the control of the applicant (uncontrollable factors) shall be undertaken by the Commission;

....

(viii) One-time tariff determination for Generating Companies, Transmission Licensee, Distribution Wires Business and Retail Supply Business, for each financial year within the Control period along with specification of indexation for specific parameters based on the approved forecast, shall be undertaken at the start of the Control Period and also reviewed at the time of the Mid-term Performance Review."

- 6.18. Regulation 7 of the MYT Regulations for FY 2011-12 to FY 2015-16 outlines the basic contours of the Business Plan to be submitted by utilities

"7.1 The Generating Company, Transmission licensee and Distribution Licensee shall file a Business Plan, for the Control Period of five (5) financial years from April 1, 2011 to March 31, 2016, as directed by the Commission, which shall comprise but not be limited to detailed category-wise sales and demand projections, power procurement plan, capital investment plan, financing plan and physical targets, in accordance with guidelines and formats, as stipulated by the Commission from time to time.

7.2 The capital investment plan shall show separately, on-going projects that will spill into the year under review and new projects (along with justification) that will commence but may be completed within or beyond the tariff period. The Commission shall consider and approve the capital investment plan for which the Generating Company and Transmission Licensee or Distribution Licensee may be required to provide relevant technical and commercial details."

- 6.19. Regulation 8 of the MYT Regulations outlines development of Forecast of Aggregate Revenue Requirement as under:

"8.1 The applicant, based on Business Plan, shall submit the forecast of Aggregate Revenue Requirement and expected revenue from tariff, for the Control Period in such manner, within such time limit thereof as provided in Part C of these Regulations and accompanied by such fee payable, as may be specified under the MERC (Fees and Charges) Regulations, 2004, as amended from time to time."

- 6.20. In accordance with the MYT Regulations and the applicable provisions of the Electricity Act 2003, the Petitioner has proceeded to prepare and submit the Business Plan for its Licensed Area Transmission Business for the second control period (FY 2013-14 to FY 2015-16).

6.21. It is to be noted that this Business Plan is being submitted on projections drawn prior to commissioning of the project. The figures stated herein are subject to modification at a later date.

Part 2: MERC (Transmission Open Access) Regulations, 2005 and Transmission Pricing Framework Order

6.22. The Hon'ble Commission has also framed MERC (Transmission Open Access) Regulations, 2005 to regulate the Transmission Open Access process in Maharashtra. In exercise of the powers vested by Electricity Act 2003, the Honourable Commission has the responsibility of development of Transmission Pricing Framework within its territorial jurisdiction i.e. for Intra-State transmission in Maharashtra.

6.23. Each transmission licensee is entitled to recover its approved ARR from intra state transmission charges (InSTS charges) collected by STU.

6.24. Aggregate of all ARR of all Transmission Licensees, as approved by the Hon'ble Commission, forms the "Pooled Cost" of the intra state transmission system, to be recovered from the Transmission System Users (TSUs) corresponding to its utilization of "Intra State Transmission capacity".

6.25. The relevant extract on "Pooled Cost" approach from the Transmission Pricing Framework Order dated 27th June 2006 is given below:

"4.2.1 Intra-State transmission system shall comprise composite transmission network of MSETCL, TPC, REL and any other transmission licensee, in future.

4.2.2 Each transmission licensee including existing transmission licensees (i.e. MSETCL, TPC and REL) shall submit its ARR Petition to the Commission in accordance with the MERC (Terms and conditions of Tariff) Regulations, 2005 and seek its approval thereof.

4.2.3 Aggregate of Annual Revenue Requirement of all licensees, as approved by the Commission, shall form "Pooled Cost" (or hereinafter termed as "Total Transmission System Cost – TTSC) of the intra-State transmission system, to be recovered from the Transmission System Users (TSUs)."

Competition and Challenges

6.26. The Petitioner has been granted transmission license for setting up and evacuation of the power from the new power plants coming up in the eastern part of the state of Maharashtra. Therefore, the major challenge before the Petitioner for its transmission business is operating & maintaining a secure and reliable transmission network for evacuation of power from the said generation plants, which will significantly cater to the increasingly growing electricity demand of the State of Maharashtra.

6.27. Multiple clearances are required for execution of transmission lines related jobs. Procedural time for obtaining clearance from agencies like Forest Department and land acquisition causes delay in implementation of the approved projects.

6.28. The main challenge for the Petitioner lies in ensuring that all its approved schemes are implemented without any cost and time overrun.

Market Issues and Challenges

- 6.29. Being a regulated business, the transmission business of the Petitioner does not foresee any market issues as such.

Market Outlook

- 6.30. The transmission business of the Petitioner, within its scope of license, will be catering to the requirement of evacuation of power from the upcoming generating stations in the north eastern part of Maharashtra. Also, according to the current regulations, these transmission lines may cater to the open access requirements of any future transmission system user, subject to availability of transmission capacity.

Chapter 7.: SWOT Analysis

7.1. This section details out a SWOT analysis of the Petitioner in the context of its existing scenario and future business outlook.

Strengths

- (a) The Petitioner leverages the competency of its well established promoter, AEL in meticulous execution of its projects. AEL is one of the prominent players in the power sector and with presence in various segments of the power sector viz., generation, transmission and trading. The promoter group company, APL, has built India's largest and one of the world's top 5 single location thermal power plants in Mundra. APL has commissioned the first supercritical 660 MW unit in the country. Mundra is also the world's first supercritical technology project to have received 'CLEAN DEVELOPMENT MECHANISM (CDM) Project certification from United Nations Framework Convention on Climate Change (UNFCCC).
- (b) The Petitioner is a new privately owned transmission company. It has following inherent advantages:
 - i. Thinking is new and innovative.
 - ii. The processes and system adopted are the latest.
 - iii. The Technology used is modern.
 - iv. Modern management Techniques.
- (c) Experience of the promoter's group companies in EHV Transmission (Transmission Line & Sub Stations) projects is being leveraged by the Petitioner.
 - i. APL, a group company, has one of the fastest turnaround time of projects in the industry. APL has already developed and commissioned 400kV D/C Mundra - Dehgam transmission line of 434 km, which is the longest transmission line by private sector. APL has also set up another 990 km \pm 500kV HVDC transmission systems for supply of power to Haryana. This is the first HVDC transmission line by private sector in the country. Along with this, APL has also set up 50 km 400kV Mohindergarh-Bhiwani transmission line for supply of power in NR.
 - ii. Adani Power Maharashtra Limited (APML), a group company, has already set up 219km 400kV Tiroda-Warora Transmission Line as an Intra-state transmission licensee in Maharashtra to evacuate power from APML's Tiroda Power Project.
- (d) The Petitioner has appointed contractors who have highly efficient technical manpower who are well qualified for the job.

Weakness

- (a) The Petitioner is presently localised only in Maharashtra.

Opportunities

- (a) Power demand in the state of Maharashtra is increasing at higher pace than national average. The intra-state transmission network of Maharashtra needs augmentation. Rollout of competitive bidding process in the state of Maharashtra for award of future Transmission projects presents an opportunity that the Petitioner may participate in.
- (b) North eastern Maharashtra has witnessed demographic concentration of power generating units. Hence, new businesses opportunities may be available to the Petitioner to transmit their power.
- (c) Maharashtra Government has provided continuous thrust on Efficient Power transmission. Opportunities continue to exist in the transmission business to introduce new technological improvements, which would result in reduction of losses, and/or lowering of operating and maintenance costs.

Threats

- (a) The transmission project is spread across Eight (8) districts of Maharashtra state. There is a volatile political situation at project sites. Further, government policies have been volatile too. The Petitioner perceives ROW issues, accessibility during operation and maintenance activity and other local issues as a threat in future operation.
- (b) The scheduled completion targets for the transmission lines are estimates and may suffer from uncontrollable delays as a result of, among other things, severe Right of Way and crop compensation issues, unforeseen engineering problems, dispute with workers, force majeure events, availability of financing, unanticipated cost increases or changes in scope and inability in obtaining certain property rights, and government approvals, any of which could give rise to cost overruns.
- (c) Power sector in India is facing highly dynamic environment on account of regulatory changes. If the approved tariffs are not in accordance with the project costs, it may result in viability issues.
- (d) The Petitioner perceives competition from other players executing similar projects.

Chapter 8.: Risk Analysis and Risk Mitigation Plan

8.1. This section lists the various kinds of risks that the Petitioner might be exposed to and how they could be averted with robust mitigation plans.

- (a) **Delay in Approvals / Clearances:** There may be delays in obtaining approvals/ clearances from the concerned authorities on account of the factors outside the direct control of the Petitioner.
- (b) **Timely Availability of Land:** There may be delays in acquiring land needed for the Transmission System on account of the factors outside the direct control of the Petitioner.
- (c) **Construction risks:** The transmission lines are still under construction and during construction may face the risk of geological surprises or uneven terrain which may require change in route of transmission lines, change in tower design or taking recourse to other measures that may impact the project cost.
- (d) **Implementation risks:** On account of the performance issues of the Petitioner's contractors. It may increase the expenses beyond the cost approved in-principle.
- (e) **Operational risks:** The Petitioner's operational performance is dependent on equipment performance, weather condition and the skill set of its staffs for operation and maintenance of the transmission system. Operational risks exist in terms of errors or defects in transmission equipment and extreme weather condition leading to economic loss due to interruptions and unavailability of part of the transmission system.
- (f) **Policy and Regulatory risks:** Transmission being a regulated business will be guided by different regulations and licence conditions. The risk of financial loss stemming from political decisions may be safeguarded under the regulatory process; however major change in the policy, regulatory and political environment may affect the overall business performance.
- (g) **Financial risks:** The proposed transmission system is financed with 70% debt using rupee term loans and the foreign currency denominated loans. Such borrowings are subject to variations in interest rates and foreign exchange rates.

8.2. The Petitioner has considered all the risks and has taken steps to mitigate the effect of these risks on business operations.

- (a) **Delay in Approvals / Clearances:** The Petitioner has already submitted required proposals duly prepared as per norms, on time. Competent people are following up with respective authorities on regular basis. However, even after such prudent measures, delay may occur in securing clearances due to uncontrollable factors.
- (b) **Timely Availability of Land:** At the commencement of the project, MSETCL had already acquired land for substation at Akola and also agreed to make it available for the Petitioner's substation. The Petitioner has been constantly following up with MSETCL to conclude this procedure; however, delays on this account are uncontrollable. Further, the Petitioner has ensured all efforts in acquisition of land for Koradi substation. However, political interference and severe objection of land owners has led to delays. In order to prevent a deadlock, the

Petitioner shifted the site. Presently, acquisition of land through experienced consolidators and in house senior level experienced persons is in final stages of completion.

- (c) **Construction risks:** Along the entire route of the proposed transmission line, a detailed route survey with soil testing has been undertaken to minimise the risk of unknown terrain. Further, EPC contracts have been awarded to a contractor having sufficient experience of implementing other projects on similar technology, which again reduces the risk. The Petitioner has also deployed experienced project management team to oversee the construction of the lines. The Petitioner holds regular meetings with vendors and sub vendors for timely execution of supplies & works. The Petitioner ensures that the works are being executed in two shifts to make up for the delays.
- (d) **Implementation risks:** The project has been awarded under an international competitive bidding procedure to reputed contractors with relevant experiences. The Petitioner has placed contracts on firm price basis for the tenure of the contract. Further, there are penalties for time overruns if it is on account of the contractors.
- (e) **Operational risk:** To overcome operational risks, measures related to system design philosophy, system maintenance & maintenance philosophy and effective spare part management system are being taken by the Petitioner. The power evacuation system is designed in a most optimum manner such that the losses in the system are minimal. The Petitioner has planned to undertake appropriate system monitoring and maintenance management systems along with effective spare part management system. All equipments have been sourced from industry's best vendors and hence failure risk is minimal. Spares of all major equipment would be maintained at site. Further, the entire system is under one year warranty by vendor for successful performance. The Petitioner has planned for comprehensive O&M services for upkeep and maintenance of the transmission lines.
- (f) **Regulatory risks:** Multi-year tariff regulations are notified for a particular Control Period. Change in regulations is a consultative process and hence before making any changes the regulators usually call for comments/ discussions on any draft regulations. Seizing such opportunities, the Petitioner intends to ensure adequate representation on any proposal it sees adverse to efficient operations of its assets and to industry as a whole.
- (g) **Financial risks:** Regulation 33 read with Regulations 11 of MYT Regulations, 2011 provide for the mitigation against variations in interest rates. The Regulations consider the rate of interest at weighted average rate of interest calculated on the basis of the actual loan portfolio at the beginning of each year applicable to the Transmission Licensee. Further, Regulation 27 of MYT Regulations, 2011 provide for the mitigation against variations in foreign exchange rates. The Regulations recognise that the capital cost shall include the expenditure incurred or projected to be incurred for interest during construction and financing charges, any gain or loss on account of foreign exchange risk variation on the loan during construction up to the date of commercial operation of the project.

Chapter 9.: Future Business Opportunities

9.1. JV opportunities to build evacuation lines

- The company may decide to form joint ventures in future with other utilities to build transmission lines in the future.

9.2. Communication using transmission infrastructure

- The Petitioner may decide to invest in power line communication, if there is demand for this in that part of Maharashtra and make this an additional source of income.

9.3. Participation in competitive bidding at central sector and state sector

- The company may participate in competitive bidding for transmission schemes at central or state sector either on a standalone basis or with other partners in joint venture.

Chapter 10.: Environment and Policy Initiatives

- 10.1. For selection of optimum route based on detailed survey, following points have been taken into consideration:
- a) The route of the transmission line does not involve any densely populated area or thick vegetations.
 - b) Any monument of cultural or historical importance is not affected.
 - c) The route does not create any threat to the survival of any community
 - d) It does not affect any Public-Utility Services like Playground, School, Other establishments, etc.
 - e) Where alternate routing is feasible, sanctuaries, National Park, etc. have been avoided.
 - f) It does not infringe with areas of natural resources.
 - g) Revenue Forest of about 26 km (11.645Ha) in line 1 and about 32.5 km (19.11Ha) in line 2 has been identified consequent to detailed survey.
- 10.2. As an environmentally responsible organisation, the group has
- (a) Adopted latest Iso-Dutch technique (First in India) in highly saline sandy soil and water (35000-45000 TDS) for Green Zone development (25845 trees, 392250 shrubs and 28785 sqm green carpet) with survival rate of more than 90% in highly saline sea dredged soil base.
 - (b) Adopted Israel's Hi-Tech Mechanized sprinkler irrigation systems & underground drip irrigation (latest systems) directly to root zone to avoid water loss via evaporation with saving of irrigation water usage up to 80% as a cost savings initiative.
 - (c) Utilized Hi-tech and latest modern technique in Horticulture sections in maintenances & new developments with increasing working efficiency with highly productivity initiatives.
 - (d) Adopted base greening concept to prevent blowing of sands with high wind velocity.
 - (e) Utilizing treated STP water in irrigation & treated Sludge into Manure in Green zone development with dual benefits i.e. fulfilment of environmental policy & saving Economy on irrigation water.
 - (f) Implemented Productive Green Zones with three major benefits such as Income generation, employment and fulfilment of environment policies.
 - (g) Planted Ready trees rather than small sapling by using modern technology which saved time, economy on maintenances and improved environment from the planting day.
- 10.3. The Petitioner has defined Environmental Management System (EMS) and Safety Management System (SMS) Procedures under ISO 14000 and OHSAS 18000 certifications respectively. The project is developing mechanism for verifying criteria laid down on standards and practices for effective control on whether these are met or exceeded, as well as for recording and reporting of results.
- 10.4. The Petitioner would ensure full adherence to all applicable social and environmental laws pertaining to its business.
- 10.5. The Petitioner's Environmental & Social Impact Assessment study identified following priority areas of social mitigation & development for the villages falling within the transmission line corridor.

Table 8: Priority areas of social mitigation & development for the villages

Priority	Area
First	Strengthening of drinking water facilities i.e. pipeline water supply system and additional tube-well/ hand-pump
Second	Strengthening of road network i.e. strengthening of village approach road and internal village road
Third	Strengthening of sanitation i.e. setting up toilets in every household, strengthening of drainage facilities and setting up of community toilets followed by strengthening of health facilities i.e. setting up of health centre/dispensary/clinic and providing ambulance services
Fourth	Strengthening of vocational training facilities i.e. assistance for self-employment/ income generation activities and training to unemployed youth
Fifth	Strengthening of educational facilities i.e. up gradation of existing school infrastructure, higher educational facilities and playground in school

10.6. In the next chapter on Corporate Social Responsibilities some details are provided in regard to the specific activities undertaken by the Petitioner.

Chapter 11.: Corporate Social Responsibility Initiatives

- 11.1. The Petitioner has always considered Corporate Social Responsibility (CSR), as an integral part of its business to provide economic, social and environmental value addition to the local communities. The dominant focus of the Company is to inculcate a sense of belonging amongst the communities towards the organization by involvement in local development issues.
- 11.2. The Petitioner has decided to carry out a comprehensive assessment of community needs in the villages adjacent to it for focused and long term development intervention. The corporate social responsibility team of the company is responsible for all CSR activities undertaken at the project locations on behalf of the company. The CSR team focuses of four key areas namely –
- (a) Education
 - (b) Community Health
 - (c) Sustainable Livelihood Development
 - (d) Rural Infrastructure Development
- 11.3. The team checks all the necessary government and environmental clearances applicable to the project location and conducts a “Need Assessment” for the region. The region is divided into core and buffer regions based on distance from the company’s establishments. Any area falling between 5-10 km range from the company’s establishments is considered as the buffer location. Any area less than 5 km is considered the core region. The “Need Assessment” is carried out by an external third party and validated by the internal team of experts in the CSR team.
- 11.4. Based on the needs identified, the team selects specific areas to address keeping in mind resource constraints. Successful pilot programs from other project locations are replicated and scaled up if there is sufficient need and priority. In case of operational challenges activities are outsourced to trusted partners who are monitored on a continuous basis by the CSR team.

Operational Plan

Chapter 12.: Capital Investment Plan

12.1. The total cost of the project comprising two single circuit 765 kV transmission lines from Tiroda to Aurangabad, associated substations at Tiroda, Koradi, Akola and Aurangabad and a 400kV D/C transmission line connecting Akola-II with Akola-I substations is estimated to be Rs. 5290.92 Crores.

Implementation Delays

12.2. The project has suffered implementation delay on account of several factors described hereunder.

Forest Clearance & RoW:

12.3. On receipt of grant of transmission license, the Petitioner conducted detail survey and ascertained the extent of forest involvement. During this stage, efforts were also made to ensure least involvement of forest in line route. Despite early action in the matter of forest clearance, delays on this account of more than 2 years are uncontrollable. In fact, vigorous follow up at every level is being done to mitigate any further delays. Since approx. 11.6447 Ha and 19.6702 Ha forest involved in line 1 and line 2 respectively. Approx. 26 km stringing section and 33 km of stringing are affected due to forest involvement.

Table 9: Current Status of Forest Clearance:

Particulars	Units	Line 1	Line 2
Area of forest involved	Ha	11.6447	19.6702
Length of line affected	km	26	33
No. Of towers affected	Nos	2	5
Date of submission of proposal		Jan 2011	Jan 2011
Stages completed		Stage-II approval received on 30.08.2013	Proposal is at PCCF, Mumbai.
Expected date		Final clearance received on 10.09.13	Final clearance expected by Feb. 2014

12.4. Further, in spite of obtaining clearances under Section 68 and section 164 of Electricity Act 2003, the Petitioner has not been able to secure ROW at various places of the proposed transmission system. RoW cases in Maharashtra are on a high and there are numerous objections raised by farmers during construction of line. We have filed cases under section 16 of Indian Telegraph Act 1885 with respective District Collector of Nagpur,

Bhandara, Gondia, Akola, Amravati, Buldhana and Jalna. However decision from Collector's office has taken almost 15 months and even after receipt of Collector order it was difficult to start work at many locations. Intervention of local politicians in Ramtek, Saoner, Katol Tahsil of Nagpur District, Warud, Morshi, Dariyapur Tehsil of Amaravati District, Buldhana District has worsened the RoW scenario.

Transmission Lines

- 12.5. The Detail survey of the project was completed before actual execution. But due to the reasons below, the Petitioner was required to carry out survey once again for line 1 and line 2.
 - (a) Involvement of Forest area necessitating line route change to minimize forest area.
 - (b) Difficulty of Route Alignment near APML's Tiroda Power Plant due to local agitation.
 - (c) Involvement of Coal belt in Saoner Area.
 - (d) Severe objection raised by M/s. Basant Agrotech in Akola area.
 - (e) Termination point of our line was changed from 765kV Aurangabad (PG) to 765kV Aurangabad (MSETCL) Substation.
- 12.6. Fifteen Locations from tower locations AP 107/0 to 111/5 are passing through Punjab Rao Deshmukh Krishi Vidyapeeth land. Approval from the competent authorities of the university consumed almost 5 months.
- 12.7. Statutory approvals from Railway, Power line Crossing and NHAI are time consuming even though repeated follow up is ensured. It has taken almost 16 months to secure the required approvals.
- 12.8. Delay in availability of shutdown for power line crossing from MSETCL and PGCIL. MSETCL has taken up to 6 months to approve shutdown for power line crossing.
- 12.9. Case for Loc. 73/0 for Akola-Aurangabad section Ckt-I was filled on 23.09.2011, judgment of the same received from high court but the land owner again filed the case at Session court at Deulgaon Raja, Dist. Magistrate Buldhana, decision for the same is still awaited from session court. It is almost consumes 24 months.

765kV Aurangabad Substation

- 12.10. Initially, the Maharashtra STU planned termination of the 2x765kV S/C Akola-Aurangabad lines at 765kV Aurangabad (Power Grid) substation.
- 12.11. The 765kV Aurangabad (PGCIL) Substation is linked with power evacuation of Chhattisgarh IPPs as informed by PGCIL in meetings held with MSETCL and the Petitioner. However, subsequent delays of planned generation at Chhattisgarh delayed the implementation of the 765kV Aurangabad (PGCIL) Substation.
- 12.12. In view of this, MSETCL decided to implement a separate 765kV Aurangabad (MSETCL) substation. Accordingly, MSETCL decided that the

2x765kV S/C Akola II – Aurangabad lines would be terminated at 765kV Aurangabad (MSETCL) substation.

- 12.13. It is learnt that contract for the 765kV Aurangabad (MSETCL) Substation has been awarded in the month of August 2012 and work has begun in November 2012. In view of this, the Petitioner expects availability of this substation only in June 2014.
- 12.14. Due to the above, overall planning of the termination bays at Aurangabad is delayed. Hence, it was discussed during various meeting with MSETCL in order to avoid bottling up of power. It was suggested that, 765kV Akola – Aurangabad line will be initially charged on 400kV level and shall be terminated at 400kV Aurangabad (Thaptitanda) S/S, MSETCL (under construction and expected by December 2013).

Contractual Works post ICB

- 12.15. For construction of 765/400kV Akola II Substation, land was acquired by MSETCL and was to be made available to the Petitioner. However, during survey, it was found that existing 11kV MSETCL line was passing through this land. Hence, it was necessary to shift this line to avoid any issue at later stage. Therefore, a local contract was awarded on M/s. KG Dutia to reroute the existing line to clear the land.
- 12.16. For the metering the power flow at Akola II substation and Koradi III substation, certain meters and metering equipment like CT's and PT's are required to be provided. For ascertaining the former, there are provisions in the Metering Code for InSTS in Maharashtra. As per metering code clause 9, the location of Main meters and standby meters are to be finalized. The definition of Meters includes relevant equipment like CT's & PT's. The accuracy class of CT's & VT's are stipulated to be similar to class of meters (refer Clause 12.5 of Code).
- 12.17. Accordingly, the Petitioner requested for approval of its metering arrangement and MSETCL approved the Metering arrangement and issued an approved drawing showing the relevant location of the metering CT's and PT's on October 14, 2011. After above approvals, technical specifications of interface meters to be installed were approved by MSETCL on May 2, 2012. Only subsequent to such approval, the Petitioner was able to procure the required equipment. In this regard, the Petitioner awarded contract on M/s. ABB.

Koradi Substation

- 12.18. During project inception, land for Koradi III Substation was identified by MSETCL. After joint site visits, it was observed that the land was not suitable due to hilly terrain and consequent involvement of huge excavation and concreting. Hence, it was not implemented there. Subsequently, the survey for suitable land was done. Due to severe political interference, RoW, non-clearance of land, acquisition of land was severely delayed. Once the land near Tidangi village was identified and acquisition process was underway, the Petitioner was required to obtain Bonafide Industrial Use certificate from GoM. The Petitioner applied for such permission on July 19, 2012 and received

final permission on September 25, 2012. Recently, we have finalised the land patch and project work has commenced in available land.

Akola II substation

- 12.19. The land for 765kV Akola II Substation was acquired by MSETCL which was to be transferred to the Petitioner.
- 12.20. In the interest of time, MSETCL permitted the Petitioner to commence construction on the land pending transfer of land. However, it was found that the land was not converted to Non-Agriculture land. Hence, SDM (Akola) issued a letter to the Petitioner for holding of works. Due to the pending application of conversion of land into Non-Agriculture, work could not be carried out and was delayed for 2 months.
- 12.21. There was a "Nallah" in the provided land for execution of switchyard. Extra filling and diverting "Nallah" along boundary wall contributed to the delay by 1 month.
- 12.22. It was agreed that marking of boundary was to be provided by MSETCL as per norms of DLR (District Land Record) department. However, it was not provided by MSETCL. Hence, the Petitioner approached DLR department for demarking of boundary which took around 3 months' time. Hence, work was discontinued for 3 months.
- 12.23. Approach road to Akola S/S was around 2m wide due to local encroachment. However, about 6m width was indicated in Khasra map. Hence, the Petitioner had to approach DLR department again for marking final approach road. This activity further led to delay of work by about two months.
- 12.24. Due to introduction of metering equipment in 400kV & 765kV switchyard by MSETCL letter dated October 14, 2011 as per the MSETCL grid code and subsequent approval of metering equipment by June 14, 2012 complete layout gets modified. This again contributed to a 3 months' delay.
- 12.25. All the above issues has hindered progress and contributed to delays which were unforeseen and uncontrollable by the Petitioner and its contractors.

Phased Commissioning of Project Elements

- 12.26. The scope of the proposed 765kV transmission project consists of several elements. At the time of grant of in-principle approval, the Petitioner had estimated completion by August, 2012. However owing to several project related hurdles beyond the control of the Petitioner as outlined above, more time is required to commission the proposed transmission project.
- 12.27. However, the Petitioner has planned commissioning of various elements of the transmission system and putting them for use in such a way that it provides sufficient reliability to the intra-state transmission network of Maharashtra and also facilitate timely evacuation of the power from the large upcoming generation capacity in north-eastern region of the state. The commissioning schedule is worked out in such a way that each set of the elements is independently capable of transmitting power from the date of its

commissioning and would become an integral part of the intra-state transmission network. Keeping this in view, following schedule of elements is planned:

Table 10: Schedule of commissioning for various element sets

Transmission lines	Line Length	Expected schedule	Element Set
Tiroda – Koradi-III 765 KV S/C Line-1	120 km	Dec, 2013	Set-2
Koradi-III – Akoka-II 765 KV S/C Line-1	270 km	Dec, 2013	Set-2
Akola-II – Aurangabad 765 KV S/C Line-1	240 km	Dec, 2013	Set-2
Tiroda – Koradi-III 765 KV S/C Line-2	120 km	Jul, 2014	Set-3
Koradi-III – Akoka-II 765 KV S/C Line-2	270 km	Jul, 2014	Set-3
Akola-II – Aurangabad 765 KV S/C Line-2	240 km	Jul, 2014	Set-3
Akola-II – Akola-I 400 KV Quad D/C Line with bays	30.65 km	Dec, 2013	Set-1
Substations	Location	Expected schedule	Element Set
Establishment of 765/400 KV switchyard	Tiroda	Dec, 2013	Set-2
Establishment of 765/400 KV substations	Koradi-III	Jul, 2014	Set-3
Establishment of 765/400 KV substations	Akola-II	Dec, 2013	Set-2
Extension of 765 KV substation	Aurangabad	Jul, 2014	Set-3

12.28. 400kV D/C Akola I - Akola II line is included in element Set-1 commissioning and planned to evacuate power of M/s Indiabulls generation at Amravati. In view of above, 400kV D/C Akola I - Akola II line along with associated bays at Akola II S/S are completed and ready for the charging. However, the 400kV bay at Akola I (MSETCL) Substation which was expected to be completed by April 2013, is still under construction. The line from Indiabulls TPP to Akola II S/S which was scheduled to be completed by May 2012 is also not ready.

The Petitioner has completed its entire works under Set-1 i.e. transmission line between Akola-II and Akola-I & associated bays in March 2013. The Petitioner has also intimated MSETCL about readiness of the said system vide its letter No. MEGPTCL/MSETCL/04032013 dated March 04, 2013 (appended as Annexure-1) and requested MSETCL to make available the 400kV bay at Akola I (MSETCL) Substation. Further, the Petitioner applied for charging clearance from Electrical inspectorate and the same is also received. (appended as

Annexure-2). Under such circumstances, the Petitioner's Akola-II to Akola-I line and associated bays at Akola II S/S which are ready for transmitting power once bays under the scope of Transmission License of APTCL are ready which is expected by September-October 2013. It may also be noted that any delay in charging of 400 kV Akola-II might also affect the commissioning schedule of 765KV bays at Akola II S/S.

- 12.29. Element Set-2 includes 765kV S/C line from Tiroda – Koradi III – Akola II– Aurangabad (Line-1) and associated sub-stations at Tiroda and Akola II.
- (a) MSETCL is developing 765kV Aurangabad Substation, which is under construction and likely to be commissioned by June, 2014.
- (b) In view of the above, it was decided that 765kV S/C Akola II – Aurangabad line will be terminated at 400kV MSETCL Aurangabad S/S. By virtue of this, bottling up of the power can be avoided.
- 12.30. Element Set-3 includes 765kV S/C line from Tiroda – Koradi III– Akola II– Aurangabad (Line-2) and associated sub-stations at Koradi III and Aurangabad. This system will also be utilised to evacuate Mahagenco's Koradi III generation, which is likely to be commissioned by this time period.
- 12.31. Hence, the Petitioner has planned commissioning of various element sets to ensure optimal utilization of elements as well as to avoid bottling up of power.

Table 11: Element set-wise capital costs

SI No.	Particulars	Set-1, Dec-13	Set-2, Dec-13	Set-3, Jul-14	Total
1	Preliminaries	0.08	1.99	1.93	4.00
2	Transmission lines				-
2.1	Supply Order	61.64	902.63	902.63	1,866.89
2.2	Service Order	14.40	165.52	165.52	345.43
3	Substation works				
3.1	Supply Order	9.78	886.00	814.13	1,709.92
3.2	Service Order	0.11	96.84	105.31	202.26
3.3	Land for S/S	-	29.00	22.00	51.00
3.4	Revised Taxes and Duties, BOCW	0.79	19.18	18.53	38.50
	SUB TOTAL 1+2+3	86.80	2101.16	2030.05	4218.01
4	Overheads				
4.1	Project Management Consultancy Services (Lahmeyer Contract)	4.15	100.35	96.95	201.45
4.2	Other Overheads	0.24	5.71	5.52	11.46

SI No.	Particulars	Set-1, Dec-13	Set-2, Dec-13	Set-3, Jul-14	Total
4.3	Contingency	2.48	60.36	62.01	124.85
4.4	Pre-operative expenses (PGCIL design cost, statutory Clearance etc.)	0.30	15.06	10.65	26.00
5	Deposit Work for bays at Aurangabad substation	-	-	32.00	32.00
6	Financing & IDC (including Lenders fee, Bank charges, BG, documentation)	7.15	173.80	286.62	467.58
7	Impact on Capital Cost due to foreign exchange rate variations	4.17	101.31	104.09	209.58
8	Total	105.30	2,557.74	2,627.88	5,290.92

12.32. In view of the above mentioned factors, total revised project cost has been estimated as Rs 5290.92 Crore.

Variation on Taxes and Duties

12.33. As per conditions in the contract awarded on contractor for Transmission Line and Substation in September 2010, any variation in taxes and duties as applicable would be passed through to the Petitioner.

12.34. At the time of award of contract, Excise Duty and Service Tax was 10.30% each. Pursuant to revision in Union Budget, the excise duty and service tax were revised to 12.36% each. The Petitioner has allowed its contractor to pass through variation on this account and accordingly included the same in capital cost for consideration and approval of the Hon'ble Commission.

Variation on account of foreign exchange

12.35. The Commission had approved the estimated cost of Rs. 4,721.88 Crore in-principle for the proposed transmission system. At 70% of the project cost, debt works out to Rs. 3,305 Crore.

12.36. The foreign currency denominated loans was available at lesser interest rate when compared with Rupee denominated loans. The Petitioner attempted to take advantage of such favourable interest rates to the extent possible based on the financial credentials of its promoter. As a result of the same, the Petitioner could enter into loan agreement with ICICI Bank, Singapore for \$100 million at the reference rate of Rs. 45.00 per USD on June 30, 2011. Thus, out of the total debt of Rs. 3,305 Crore, Rs. 450 Crore were envisaged from foreign currency denominated loans.

12.37. The disbursed amount of \$100 million was converted to Rs.447.5 Crore at the RBI remittance rate of Rs. 44.75 per USD on August 5, 2011. Therefore, on account of such variation in foreign exchange rate, there was a loss of Rs. 0.25 per USD, which reduced the amount of rupee converted ECB loan by Rs.

2.50 Crore. The Petitioner had to arrange for such shortfall of Rs. 2.50 Crore to implement the proposed transmission system.

12.38. It is pertinent to note that the Indian rupee has depreciated from the mentioned reference rate. As a result, liability of the foreign currency denominated loan has increased in terms of Indian rupees which impacts the cost of servicing such loan as well as repayment of such loan.

12.39. In this regard, the provisions of Regulation 27.1 (a) of MYT Regulations, 2011 may be referred as under:

"27.1 Capital cost for a project shall include:

(a) the expenditure incurred or projected to be incurred, including interest during construction and financing charges, any gain or loss on account of foreign exchange risk variation on the loan during construction up to the date of commercial operation of the project, as admitted by the Commission, after prudence check;"

12.40. In accordance with the above provisions, the Petitioner has considered impact of foreign exchange rate variation on the foreign currency denominated loan portfolio at the time of capitalising sets of elements. For the purpose of this business plan, the Petitioner has considered the exchange rate of Rs. 65.7050 per USD as on August 30, 2013 to determine the impact of foreign exchange rate variation on its foreign currency denominated loans.

Overheads

12.41. Project Management Consultancy contract was given to M/s Lahmeyer India up to envisaged completion period on monthly basis. Subsequently, overall project was delayed due to various reasons consultancy contract was also required to be extended up to completion of project. Hence, the work award extended for balance period of project.

12.42. Regulation 30 of MYT Regulations states:

"30.1 For a project declared under commercial operation on or after April 1, 2011, if the equity actually deployed is more than 30% of the capital cost, equity in excess of 30% shall be treated as normative loan for the Generating Company, Transmission Licensee and Distribution Licensee:

Provided that where equity actually deployed is less than 30% of the capital cost of the capitalized asset, the actual equity shall be considered for determination of tariff:

30.3 Any expenditure incurred or projected to be incurred on or after April 1, 2011, as may be admitted by the Commission as additional capital expenditure for determination of tariff, and renovation and modernization expenditure for life extension, shall be serviced in the manner specified in the Regulation."

12.43. In line with the above provisions of MYT Regulations, the Petitioner proposes to fund the project with normative debt-equity ratio of 70:30. The detail of source of funding is as shown below:

Table 12: Sources of funding

Particulars	Basis	Rs. Crore
Hard Cost including contingency		4,613.75
IDC including financing cost		467.58
Impact on Capital Cost due to foreign exchange rate variations		209.58
Project Cost including IDC		5290.92
Equity	30% of project cost	1,587.27
Debt	70% of project cost	3,703.64
Debt- ECB	In USD	100 million
Debt- Domestic loan	In INR	3,253.64 Crore
Interest Rate for ECB	For serving in USD	LIBOR + 4.20% p.a.
Interest Rate for domestic loan	For serving in INR	Base rates of ICICI/ SBI + 2.50% p.a.

12.44. Based on the delivery schedule for the various items and the project schedule, the estimated expenditure during project execution on yearly basis is as shown below.

Table 13: Phasing of expenditure

Particulars (in Rs Crs)	FY 10-11	FY 11-12	FY 12-13	FY 13-14	FY 14-15	Total
Phasing of Expenditure including IDC	0.05	1,515.42	1405.57	1970.83	399.05	5290.92
IDC	-	47.04	137.98	231.2	51.47	467.58

12.45. Based on the abovementioned estimated Capital Cost and other details, indicative tariff components have been worked out as detailed in subsequent part of the Business Plan.

Chapter 13.: Return on Equity (RoE)

- 13.1. Regulation 32 of the MYT Regulation provides for Return on Equity Capital as under:

"32.2 Transmission Licensee and Distribution Licensee

32.2.1 Return on equity capital for the Transmission Licensee and Wired Business of Distribution Licensee shall be computed on the equity capital determined in accordance with Regulation 30 at the rate of 15.5% per cent per annum, and for the Retail Supply of Electricity of Distribution Licensee, Return on equity capital shall be allowed a return at the rate of 17.5% per cent per annum, in Indian Rupee terms, on the amount of equity capital determined in accordance with Regulation 30."

- 13.2. The Petitioner submits that the provision for determining RoE estimation for assets having commercial operation only for the part of the year works for an existing licensee and not for a new licensee which would start commercial operation during the control period. The Petitioner submits that the provision of Regulation 32 mentioned above lays importance in case of multiple assets being commissioned by existing licensees at multiple dates. Whereas, the Petitioner has definite commercial operation date for various sets of elements which is very different from the condition of any existing licensee which commissions its assets at different dates. Therefore, instead of approximating normative interest expense for part of the year, the Petitioner has considered the exact date of commercial operation and estimated the RoE on proportionate basis corresponding to the period of commercial operation for the respective FY 2013-14 and FY 2014-15.
- 13.3. Therefore, for the first year of operation of respective sets of elements, the RoE has been estimated on proportionate basis corresponding to the actual number of days of operation. The RoE for the balance period has been estimated in accordance with Regulation 32 of the MYT Regulations, 2011.
- 13.4. In accordance with the stated provision of the MYT Regulations, a regulated Return on Equity of 15.5% has been considered in computing returns as follows:

Table 14: Return on Equity

Particulars (in Rs Crore)	FY 13-14	FY 14-15	FY 15-16
Opening Equity and reserves	-	798.91	1,587.27
Additions to equity towards capital investments	798.91	788.36	-
Closing balance of Equity and Reserves	798.91	1,587.27	1,587.27
ROE @ 15.5%	41.05	215.56	246.03

Note:- For detail calculation, please refer Format F8

Chapter 14.: Operation and Maintenance (O&M) Expenses

- 14.1. Regulation 61.5 provides for calculation of Operation and Maintenance expenses as follows:

"61.5 Operation and Maintenance expenses

61.5.1 The norms for O&M expenses for existing and new Transmission Licensees have been stipulated for the Control Period on the basis of circuit kilometer of transmission lines and number of bays in the substation of the Transmission Licensee, as given below:

61.7 O&M Norms for New Transmission Licensee

61.7.1 For the new Transmission Licensee, the year-wise O&M norms as stipulated for MSETCL shall be the applicable norms for transmission assets added by such new Transmission Licensee (s) for respective year during the third Control Period.

Provided that the same shall not be applicable to those new projects which are awarded on a competitive bidding basis.

Explanation: *The term "New Transmission Licensee" shall mean the transmission licensee(s) for which Transmission License is granted by the Commission prior to or after the date of effectiveness of these Regulations, and whose transmission project assets are commissioned after March 31, 2011.*

61.10.1 Contingency reserve of the Transmission Licensee shall be allowed as specified in Regulation 36 of these regulations."

- 14.2. The Petitioner submits that the provision for determining O&M expense for assets having commercial operation only for the part of the year works for an existing licensee and not for a new licensee which would start commercial operation during the control period. The Petitioner submits that the provision of Regulation 61 mentioned above lays importance in case of multiple assets being commissioned by existing licensees at multiple dates. Whereas, the Petitioner has defined commercial operation date for various sets of elements which is very different from that of any existing licensee which commissions its assets at different dates. Therefore, instead of approximating normative interest expense for part of the year, the Petitioner has considered the exact date of commercial operation and estimated the O&M expense on proportionate basis corresponding to the period of commercial operation for the respective FY 2013-14 and FY 2014-15.
- 14.3. Therefore, for the first year of operation of respective sets of elements, the O&M expense has been estimated on proportionate basis corresponding to the actual number of days of operation. The O&M expense for the balance period has been estimated in accordance with Regulation 61 of the MYT Regulations, 2011.
- 14.4. Since the Petitioner is a new licensee in the state of Maharashtra, historical data on O&M expenses specific to its own business is not available. Hence it is difficult to estimate O&M expenses at present. For the purpose of this Business Plan, the Petitioner has computed O&M expenses as per norms in MYT Regulations. Since the asset mix and their characteristics is significantly different for the Petitioner from that of MSETCL, it is submitted

that during sustained operations, prudently incurred O&M expenditure may vary from those of MSETCL. Therefore, for any such variation in O&M expenses from the normative expenses, the Petitioner will approach the Hon'ble Commission for kind consideration.

- 14.5. By applying norms in MYT Regulations to the line length and the number of bays that would be constructed over the control period, the Petitioner has computed O&M expenses at the end of each year in the control period as below:

Table 15: O&M Expenses

Particulars	Units	FY 2013-14	FY 2014-15	FY 2015-16
For Line				
765 KV	Ckt.km	630	1260	1260
400 KV	Ckt.km	61.3	61.3	61.3
MERC Norms	Rs lakh/ckt-km			
765 KV	Rs lakh/ckt-km	0.83	0.88	0.93
400 KV	Rs lakh/ckt-km	0.59	0.63	0.66
For Bay				
765 KV	No	19	36	36
400 KV	No	12	22	22
MERC Norm				
765 KV	Rs lakh/bay	146.68	155.07	163.94
400 KV	Rs lakh/bay	104.78	110.78	117.11
O&M Expenses	Rs Crore	15.26	80.95	96.91

Note:- For detail calculation, please refer Format F 2.1

Chapter 15.: Depreciation

15.1. Regulation 31 of the MYT Regulations provides for Capital Cost as a value base for the purpose of depreciation as follows:

"31.1 The value base for the purpose of depreciation shall be the Capital Cost of the asset admitted by the Commission.

31.2 The Generation Company and Transmission Licensee or Distribution Licensee shall be permitted to recover depreciation on the value of fixed assets used in their respective Business computed in the following manner:

(a) The approved original cost of the project/fixed assets shall be the value base for calculation of depreciation:

Provided that the depreciation shall be allowed on the entire capitalized amount of the new assets after reducing the approved original cost of the project/fixed assets of retired or replaced assets.

(b) Depreciation shall be computed annually based on the straight line method at the rates specified in the Annexure I to these Regulations:

Provided that the Generating Company or Transmission Licensee or Distribution Licensee shall ensure 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 shall be spread over the balance useful life of the asset, as provided in these Regulations.

....

31.5 In case of projected commercial operation of the assets for part of the year, depreciation shall be calculated based on the average of opening and closing value of assets, approved by the Commission.

Provided that depreciation shall be re-calculated for assets capitalized at the time of Mid-term Performance Review or at the time of final truing up during determination of tariff for third Control Period, based on documentary evidence of assets capitalized by the applicant, subject to the prudence check of the Commission, such that the depreciation is calculated proportionately from the date of capitalization."

15.2. The Petitioner submits that the provision for determining depreciation for assets having commercial operation only for the part of the year works for an existing licensee and not for a new licensee which would start commercial operation during the control period. The Petitioner submits that the provision of Regulation 31 mentioned above lays importance in case of multiple assets being commissioned by existing licensees at multiple dates. Whereas, the Petitioner has definite commercial operation date for various sets of elements which is very different from the condition of any existing licensee which commissions its assets at different dates. Therefore, instead of approximating normative interest expense for part of the year, the Petitioner has considered the exact date of commercial operation and estimated the depreciation on proportionate basis corresponding to the period of commercial operation for the respective FY 2013-14 and FY 2014-15.

15.3. Therefore, for the first year of operation of respective sets of elements, the depreciation has been estimated on proportionate basis corresponding to the actual number of days of operation. The depreciation for the balance

period has been estimated in accordance with Regulation 31 of the MYT Regulations, 2011.

- 15.4. It is submitted that since transmission system of MEGPCTL is still under construction and audited capital cost details are not available, it is not possible to carry out exact asset class wise break up of capital cost at this stage except land. Further, the Depreciation rate prescribed by the Hon'ble Commission under Annexure I of MYT regulations, 2011 for transmission lines and substations, which is the major portion of the entire capital cost, is the same i.e. 5.28%. Under such circumstances, break up of capital cost will not have any impact calculation of depreciation. Hence, for the purpose of calculating Depreciation, MEGPTCL has considered depreciation rate of 5.28% for assets under the heads of Plant and Machinery except Land. Accordingly, Depreciation has been computed annually using the straight line approach as follows:

Table 16: Depreciation Expenses

Depreciation (in Rs Crore)	FY 2013-14	FY 2014-15	FY 2015-16
GFA –Opening balance	-	2,663.04	5,290.92
GFA- Addition	2,663.04	2,627.88	-
GFA –Closing balance	2,663.04	5,290.92	5,290.92
Total Depreciation	46.11	242.36	276.67

Note:-For detail calculation, please refer Format F5 (Estimated value of land component in GFA has been deducted for depreciation computation.)

Chapter 16.: Interest expense on long term loan

- 16.1. Regulation 33.1 of MYT Regulations, 2011 indicates that normative loan equivalent to 70% of total capital cost of the assets needs to be considered for estimation of interest expenses. Further, Regulation 33.3 indicates that the repayment of loans shall be considered equal to the depreciation allowed for the respective year.
- 16.2. The Petitioner has opted for foreign currency denominated loans at lower interest rates. ECB worth \$100 million was sanctioned at the reference rate of Rs. 45.00 per USD on June 30, 2011. However, the disbursed amount of \$100 million was converted to Rs.447.5 Crore at the RBI remittance rate of Rs. 44.75 per USD on August 5, 2011.
- 16.3. The said ECB loan of \$100 million was sanctioned at USD LIBOR plus 4.50% per annum all in cost. However, the Petitioner has been in constant endeavour to optimise the cost of the proposed transmission system. The Petitioner has negotiated with the lender to reduce the interest rate. Lender has charged 2% upfront fees to reduce the interest rate by 30 bps (basis points) to USD LIBOR plus 4.20% per annum.
- 16.4. For the purpose of this business plan, the Petitioner has considered LIBOR at 0.5% and thus, the interest rate applicable on USD denominated ECB at LIBOR plus 4.20% comes to 4.70%.
- 16.5. Regulation 33.5 and 33.6 of the MYT Regulations provide for determination of interest expenses based on actual loan portfolio as follows:
- "33.5 The rate of interest shall be the weighted average rate of interest calculated on the basis of the actual loan portfolio at the beginning of each year applicable to the Generating Company or the Transmission Licensee or the Distribution Licensee:*
- Provided that if there is no actual loan for a particular year but normative loan is still outstanding, the last available weighted average rate of interest shall be considered:*
- Provided further that if the Generating Company or the Transmission Licensee or the Distribution Licensee, as the case may be, does not have actual loan, then the weighted average rate of interest of the Generating Company or the Transmission Licensee or the Distribution Licensee as a whole shall be considered.*
- 33.6 The interest on loan shall be calculated on the normative average loan of the year by applying the weighted average rate of interest."*
- 16.6. Therefore, the Petitioner in accordance with the provisions of the MYT Regulations, 2011 as stated above has worked out the normative loan and corresponding interest expense based on its actual loan portfolio (which includes both foreign currency denominated loan and rupee denominated loan).

Table 17: Determination of weighted average interest rate

Particulars	FY 2013-14	FY 2014-15	FY 2015-16
Loan 1: RTL			
Opening Balance of Loan	1,124.04	2,882.10	3,075.72
Addition during the year	1,799.80	329.80	-
Loan Repayment during the year	41.74	136.18	203.90
Closing Balance of Loan	2,882.10	3,075.72	2,871.82
Applicable Interest Rate (%)	12.58%	12.33%	12.33%
Loan 2 : ECB USD 100 Million			
Opening Balance of Loan	100.00	100.00	92.65
Addition during the year	-	-	-
Loan Repayment during the year	-	7.35	7.35
Closing Balance of Loan	100.00	92.65	85.30
Applicable Interest Rate (%)	4.70%	4.70%	4.70%
Weighted average interest rate	9.67%	10.91%	11.07%

Note:- For detail calculation, please refer Format F6

- 16.7. The Petitioner submits that the estimated interest rates are based on prevailing rate of LIBOR and base rates of ICICI/ SBI. The Petitioner submits that any variation in interest rate resulting on account of actual variation in reference rates will be submitted for the Commission's perusal for kind approval.
- 16.8. The Petitioner submits that the provision for determining interest expense estimation for assets having commercial operation only for the part of the year works for an existing licensee and not for a new licensee which would start commercial operation during the control period. The Petitioner submits that the provision of Regulation 33 mentioned above lays importance in case of multiple assets being commissioned by existing licensees at multiple dates. Whereas, the Petitioner has definite commercial operation date for all of its assets which is very different from the condition of any existing licensee which commissions its assets at different dates. Therefore, instead of approximating normative interest expense for part of the year, the Petitioner has considered the exact date of commercial operation and estimated the normative interest expense on proportionate basis corresponding to the period of commercial operation for the respective FY 2013-14 and FY 2014-15.
- 16.9. Therefore, for the first year of operation of respective sets of elements, the normative interest expense has been estimated on proportionate basis

corresponding to the actual number of days of operation. The interest expense for the balance period has been estimated in accordance with Regulation 33 of the MYT Regulations, 2011.

16.10. Due consideration has been given to the normative loan repayment being equal to the depreciation claimed for the respective year while applying such weighted average interest rate.

16.11. Thus the interest expense estimated is provided in the table below for the approval of the Hon'ble Commission.

Table 18: Interest Expenses

Interest expense (in Rs Crore)	FY 2013-14	FY 2014-15	FY 2015-16
Debt- Opening balance	-	1,818.02	3,415.17
Debt-Additions	1,864.13	1,839.51	-
Debt-Repayment	46.11	242.36	276.67
Debt- Closing balance	1,818.02	3,415.17	3,138.50
Weighted average Interest rate	9.67%	10.91%	11.07%
Interest expenses	59.04	337.29	362.72

Note:- For detail calculation, please refer Format F6

Chapter 17.: Interest on Working Capital

17.1. As per Regulation 35 of the MYT Regulations, provision for Interest on Working Capital has been given as under:

"35.2 Transmission:

(a) The Transmission Licensee shall be allowed interest on the estimated level of working capital for the financial year, computed as follows:

(i) One-twelfth (1/12) of the amount of operation and maintenance expenses for such financial year; plus

(ii) One-twelfth (1/12) of the sum of the book value of stores, materials and supplies including fuel on hand at the end of each month of such financial year; plus

(iii) One and half (1½) months equivalent of the expected revenue from transmission charges at the prevailing tariff;

minus

(iv) Amount, if any, held as security deposits from Transmission System Users.

(b) Rate of interest on working capital shall be on normative basis and shall be equal to the State Bank Advance Rate (SBAR) of State Bank of India as on the date on which the application for determination of tariff is made.

(c) Interest shall be allowed on the amount held as security deposit from Transmission System Users at the Bank Rate as at the date on which the application for determination of tariff is made. "

17.2. In accordance with above provision, we have considered rate of interest on working capital to be 14.45 % p.a. which is then applied on the working capital to arrive at the interest on working capital as given below:

Table 19: Working Capital Assumptions

Working Capital Assumptions	In months
O&M Expenses	1 months
Stores, Materials and Supplies @ 1% of GFA	1 months
Revenue	1.5 months
Interest on working capital @ SBIPLR on the date of filing the Application	14.45%

17.3. The Petitioner submits that the provision for estimating interest expense on working capital for assets having commercial operation only for the part of the year works for an existing licensee and not for a new licensee which would start commercial operation during the control period. The Petitioner submits that the provision of Regulation 35 mentioned above lays importance in case of multiple assets being commissioned by existing licensees at multiple dates. Whereas, the Petitioner has definite commercial operation date for various sets of elements which is very different from the condition of any existing licensee which commissions its assets at different dates. Therefore, instead of approximating normative interest expense for part of the year, the Petitioner has considered exact date of commercial operation

and estimated interest expense on working capital on proportionate basis corresponding to the period of commercial operation for the respective FY 2013-14 and FY 2014-15.

17.4. Therefore, for the first year of operation of respective sets of elements, the interest expense on working capital on proportionate basis corresponding to the actual number of days of operation. The interest expense on working capital for the balance period has been estimated in accordance with Regulation 35 of the MYT Regulations, 2011.

17.5. The Petitioner submits that it doesn't envisage any security deposits from Transmission Users and hence has not been considered in the working capital estimations.

Table 20: Working Capital Expenses

Working Capital (in Rs Crore)	FY 2013-14	FY 2014-15	FY 2015-16
One month equivalent of Operations and Maintenance Expenses	3.84	7.64	8.08
One-twelfth of the sum of the book value of stores, materials and supplies	2.22	4.41	4.41
One and a half months of the expected revenue from transmission charges at the prevailing tariffs	71.60	139.84	136.84
Total Working Capital Requirement	77.65	151.88	149.32
Interest on Working Capital@ 14.45%	3.72	19.22	21.58

Note:- For detail calculation, please refer Format F6

Chapter 18.: Contribution to Contingency Reserves

18.1. As per Regulation 36, relevant provisions from Contribution to contingency reserves are as under:

"36.1 Where the Transmission Licensee or Distribution Licensee has made an appropriation to the Contingency Reserve, a sum not less than 0.25 per cent and not more than 0.5 per cent of the original cost of fixed assets shall be allowed annually towards such appropriation in the calculation of aggregate revenue requirement:

Provided that where the amount of such Contingencies Reserves exceeds five (5) per cent of the original cost of fixed assets, no such appropriation shall be allowed which would have the effect of increasing the reserve beyond the said maximum:

Provided further that the amount so appropriated shall be invested in securities authorized under the Indian Trusts Act, 1882 within a period of six months of the close of the financial year."

18.2. In accordance with the above provisions, Contingency reserves are taken at 0.5% of fixed assets as yearly contribution. Accordingly, we have calculated the contingency reserves for the next control period as under:

Table 21: Contingency Reserve Expenses

Contingency Reserves (in Rs Crs)	FY 2013-14	FY 2014-15	FY 2015-16
GFA	2,663.04	5,290.92	5,290.92
Contingency Reserve as a % of fixed assets	0.5%	0.5%	0.5%
Contingency Reserve	13.32	26.45	26.45

Chapter 19.: Other Expenses

19.1. As submitted in the Chapter 12 of this business plan, the Petitioner is committed to its social responsibilities while performing as a responsible Organisation. In accordance with that, the Petitioner estimates following expenses on account of Corporate Social Responsibilities.

Table 22: Expenses for corporate social responsibility

Other Expenses (in Rs Crore)	FY 2013-14	FY 2014-15	FY 2015-16
Corporate Social responsibility	0.50	0.75	1.00

19.2. As submitted before, the Petitioner attempted to take advantage of lower interest rates on foreign denominated currency to contain the cost of funding the proposed transmission project. Subsequently, the Petitioner entered into a loan agreement with ICICI Bank, Singapore for \$100 million.

19.3. The Petitioner submits that there is a risk of foreign exchange variation in the debt funded through foreign financial institutions while servicing or repaying such debt. The Petitioner may enjoy the gain on foreign exchange variation in some years and it may result in a loss in some years.

19.4. The Petitioner submits that any variation in interest rate resulting on account of actual variation in foreign exchange rate will be submitted for the Commission's perusal. The Petitioner submits that such loss or gain on account of foreign exchange rate variation would be claimed as a part of "Other expenses". The Petitioner shall approach the Hon'ble Commission for approval of such adjustments for the years falling under the control period of second MYT.

19.5. Therefore, the expenses under this head are estimated as shown below.

Table 23: Other expenses

Other Expenses (in Rs Crore)	FY 2013-14	FY 2014-15	FY 2015-16
Corporate Social responsibility	0.50	0.75	1.00
Total	0.50	0.75	1.00

Note:- For detail calculation, please refer Format F7

Chapter 20.: Non-tariff Income

20.1. The Petitioner has considered an interest income on the contingency reserve as Non-tariff Income. As per Regulation 36.1, the Petition is required to invest the fund available under Contingency Reserve in securities authorized under the Indian Trust Act, 1882. Presently, the rates of such securities range between 7-8% which in may get stabilize at around 7-7.5% in next 2-3 years. Accordingly, the Petitioner has considered interest rate of 7.25% per annum on Contingency Reserve for the purpose of calculation of Income on Non-tariff. Apart from the interest income from the contingency reserve the Petitioner doesn't envisage any other non-tariff income.

Table 24: Non-tariff income

Non tariff income (in Rs Crore)	FY 2013-14	FY 2014-15	FY 2015-16
Gain/ Loss on account of Foreign exchange rate variation	-	-	-
Non tariff income	-	0.48	1.92
Total	-	0.48	1.92

Note:- For detail calculation, please refer Format F 9

Chapter 21.: Income from Other Business

- 21.1. The Petitioner will evaluate the options of using transmission assets for other business and will project the revenue from it, if any in future. However the Petitioner does not anticipate any income from other business at present.

Chapter 22.: Scenario Analysis

22.1. Based on the above analysis the aggregate revenue requirement for the control period FY 2013-14 through FY 2015-16 will be as below.

Table 25: Annual revenue requirement- Normal scenario

SL.No.	Particulars	FY 2013-14	FY 2014-15	FY 2015-16
1	Operation & Maintenance Expenses	15.26	80.95	96.91
2	Depreciation	46.11	242.36	276.67
3	Interest on Long-term Loan	59.04	337.29	362.72
4	Interest on Working Capital	3.72	19.22	21.58
5	Other Expenses	0.50	0.75	1.00
6	Contribution to Contingency Reserves	13.32	26.45	26.45
7	Income Tax Expense	10.89	57.17	65.25
8	Total Revenue Expenditure	148.82	764.21	850.58
9	Return on Equity Capital	41.05	215.56	246.03
10	Aggregate Revenue Requirement	189.88	979.77	1,096.61
11	Less: Non-tariff Income	-	0.48	1.92
12	Less: Income from Other Business	-	-	-
13	Aggregate Revenue Requirement	189.88	979.29	1,094.68

22.2. The income tax is also included in the ARR for the control period at a MAT rate of 20.96%.

22.3. We have considered the impact on various components due to increase in capital cost by 2%

Table 26: Scenario Analysis with Cost Escalation of 2%- Pessimistic scenario

SL.No.	Particulars	FY 2013-14	FY 2014-15	FY 2015-16
1	Operation & Maintenance Expenses	15.26	80.95	96.91
2	Depreciation	47.04	247.26	282.25
3	Interest on Long-term Loan	60.22	344.04	369.97
4	Interest on Working Capital	3.78	19.56	21.95

SL.No.	Particulars	FY 2013-14	FY 2014-15	FY 2015-16
5	Other Expenses	0.50	0.75	1.00
6	Contribution to Contingency Reserves	13.58	26.98	26.98
7	Income Tax Expense	11.10	58.31	66.55
8	Total Revenue Expenditure	151.48	777.85	865.61
9	Return on Equity Capital	41.87	219.87	250.95
10	Aggregate Revenue Requirement	193.36	997.72	1,116.56
11	Less: Non Tariff Income	-	0.49	1.96
12	Less: Income from Other Business	-	-	-
13	Aggregate Revenue Requirement	193.36	997.23	1,114.60

22.4. We have considered the impact on various components due to reduction in capital cost by 2%.

Table 27: Scenario Analysis with Cost Reduction of 2%- Optimistic scenario

SL.No.	Particulars	FY 2013-14	FY 2014-15	FY 2015-16
1	Operation & Maintenance Expenses	15.26	80.95	96.91
2	Depreciation	45.17	237.47	271.08
3	Interest on Long-term Loan	57.86	330.55	355.48
4	Interest on Working Capital	3.66	18.88	21.20
5	Other Expenses	0.50	0.75	1.00
6	Contribution to Contingency Reserves	13.05	25.93	25.93
7	Income Tax Expense	10.67	56.02	63.94
8	Total Revenue Expenditure	146.16	750.56	835.53
9	Return on Equity Capital	40.23	211.25	241.11
10	Aggregate Revenue Requirement	186.39	961.81	1,076.64
11	Less: Non Tariff Income	-	0.47	1.89
12	Less: Income from Other Business	-	-	-
13	Aggregate Revenue Requirement	186.39	961.33	1,074.75

Chapter 23.: Performance Targets

- 23.1. The transmission system is expected to be commissioned in FY 2013-14 and FY 2014-15. Therefore, at this stage the behaviour of the transmission line with respect to load and voltage profile is not known. However, the Petitioner has endeavoured to put all prudent engineering practices for erection of the transmission line and shall also deploy standard commissioning procedure to ensure that the transmission line will be ready to deliver reliable and efficient transmission services to its beneficiaries.
- 23.2. The Petitioner understands that the Hon'ble Commission will set required performance targets while assessing the Petitioner's Business Plan and undertake tariff determination.

Chapter 24.: Other Initiatives

24.1. For other initiatives of the Petitioner, chapters 11 and 12 may be referred to.

Chapter 25.: Other Information

25.1. At present the Petitioner does not envisage any other information that has any material bearing in this business plan.

Chapter 26.: Prayers

26.1. The present petition is submitted by the Petitioner to the Hon'ble Commission for approval of Business Plan for Transmission business of the Company under the second MYT Control Period from FY 2013-14 to FY 2015-16. In view of the above facts and circumstances, the Petitioner prays to the Hon'ble Commission that it may be pleased to:

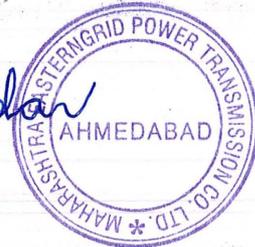
- (a) Admit this petition of the Petitioner for approval of Business Plan for the MYT Control period from FY 2013-14 to FY 2015-16 submitted herewith.
- (b) Approve the Business Plan for the MYT Control Period from FY 2013-14 to FY 2015-16 along with the relevant operational and financial parameters as proposed in this petition.
- (c) Pass suitable orders with respect to the Business Plan for the MYT Control Period from FY 2013-14 to FY 2015-16 as proposed by the Petitioner in this petition along with the relevant operational and financial parameters as proposed in the petition.
- (d) Permit the Petitioner to propose suitable changes to the Business Plan, as may be required, prior to the final approval by the Hon'ble Commission.
- (e) Pass such further orders, as the Hon'ble Commission may deem fit and appropriate keeping in view the facts and circumstances of the case.
- (f) Condone any inadvertent omissions/errors/shortcomings and permit the Petitioner to add/change/modify/alter this filing and make further submissions as may be required at a future date.

For Maharashtra Eastern Grid Power Transmission Limited

Place: AHMEDABAD

Date: 09.11.2013

VhJadav
Vipul Jadav



Annexure

Annexure 1.: Letter to MSETCL with Copy to STU dated March 04, 2013

Annexure 2.: Application for Charging Permission and Charging Permission

MAHARASHTRA EASTERN GRID POWER TRANSMISSION COMPANY LIMITED
8th Floor, A - wing, Sambhav Building, Judges Bungalow Road, Bodakdev, Ahmedabad 380 015.

Ref.: MEGPTCL/MSETCL/04032013/
4th March, 2013

To,
Director (Project)
Maharashtra State Electricity Transmission Company Limited,
"Prakashganga" Bandra-Kurla Complex,
Bandra (East)
Mumbai - 400051.

Subject: Initial charging of 400kV D/C Akola I - Akola II line

Dear Sir,

Greetings from Maharashtra Eastern Grid Power Transmission Company Ltd.

We would like to inform that our 400kV Akola I - Akola II line is completed and made available for charging by 13th March, 2013. The associated bay at 400kV Akola - II sub-station is also completed.

In view of the above, we would like to carry out initial charging of this line by March, 2013 from Akola - I sub-station.. Hence, you are requested to ensure completion of associated bays at 400kV Akola - I sub-station, to avoid any delay at later stage.

With reference to above, we learnt that, the connection agreement with MSETCL is also required to be executed by MEGPTCL for interconnection at 400kV MSETCL Akola - I S/S. In this regards, draft connection agreement shall be submitted to you for your observation, in week time.

Yours sincerely,


Deepak Bhargava
(Authorized Signatory)

Cc: CE STU, MSETCL

MAHARASHTRA EASTERN GRID POWER TRANSMISSION COMPANY LIMITED

8th Floor, A - wing, Sambhav Building, Judges Bungalow Road, Bodakdev,
Ahmedabad 380 015.

To,

Dt.22.03.2013

Chief Engineer (Electrical)
PWD deptt.
3rd Floor, Bandhkam Bhavan
25, Marzban Road
Fort, Mumbai-400001 (M.S.)
Tele: 022-22013415/16/17
Fax: 022-22016900

Sub: Application for Inspection of EHV Installation- 400KV Bays at 765/400kV
Akola-II Substation, Akola, Maharashtra.

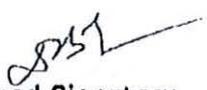
Dear Sir,

Maharashtra Eastern Grid Power Transmission Company Ltd (MEGPTCL) is developing intra-state Transmission System including substation at various location in Maharashtra. MEGPTCL has installed a 400kV AC Switchyard at 765/400kV Akola-II Substation, Kanshivani road, Yelwan village, Akola, Maharashtra as part of Transmission system

With reference to subsequent drawing approval from your good office, we hereby submitting the application for statutory inspection of 400kV AC Switchyard.

We request you to kindly inspect the installation of 400kV AC Switchyard & please inform us your inspection program so that necessary arrangement/readiness of documents to be arranged.

Yours Faithfully,


Authorized Signatory

Maharashtra Eastern Grid Power Transmission Company.

Registered Office: "Adani House" Mithakhali Six Roads, Navrangpura,
Ahmadabad 380 009, Gujarat

Phone: 91-(79)-2555 6945

Fax: 91-(79)-2555 7237

22/3/13
22/3/13
380 009

Government of Maharashtra

Office of the Chief Engineer (Elec.),
P.W.D. Deptt., Govt. of Maharashtra,
Bandhkam Bhavan, 3rd floor,
Marzban Road, Fort,
Mumbai- 400 001.

Website : www.mahapwd.com

Email : elmumbai.cc@mahapwd.com

No.CE(Elec.)/Desk-1/1/502/2013

Telephone : (022) 22013415/16/17

Fax : (022) 22016900

Date : - 3 APR 2013

~~To,~~

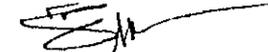
To,
Maharashtra Eastern Grid Power Transmission Co. Ltd,
7 65Kv Substation Village Yelwan Akola to Barsil Takli Road
Dist. Akola

Sub :- Provisional charging Permission for 400 KV AC Switchyard at
765/400KV Akola-II Substation Kashivani road, Yelwan village,
Dist.- Akola.

Ref :- Letter Dated 22.03.2013

With reference to above, Provisional charging Permission for 400 KV AC Switchyard at 765/400KV Akola-II Substation Kashivani road, Yelwan village, Dist.- Akola. here by accorded as per provision under rule no 65 and 67 of Indian Electricity Rules 1956. (C.E.A. Regulation 2010 46 & 48) The permission is granted for the Period of 60 days (2 months)

The installation should be maintain under safe working condition.



(S.T.Valekar)
Chief Engineer (Elec.)

Copy to: - Superintending Engineer Reg. Circle Amravati for information.

MAHARASHTRA EASTERN GRID POWER TRANSMISSION COMPANY LIMITED"Shree Jee House", 2nd Floor, Plot No: 39, Kotwal Nagar, King Road, Nagpur - 440022

Phone No. 0712-2289361

Fax No.0712-2420335

Ref: MEGPTCL/NGP/MSETCL/400/60012th April 2013

To,
The Chief Engineer (Electrical)
Public Works Department
Bandhkam Bhawan
3rd Floor, Marzabag Road Fort
Mumbai - 400 001

Sub: - Application for inspection of 400 kV D/C (QUAD) Akola-II to Akola-I Transmission Line.**Ref:**

1. Our Letter No. MEGPTCL/NGP/MSETCL/400/444 dated 19.11.2012.
2. Your Letter No. CE (Elec.)/Desk 1/1/299/2013 dated 05.03.2013.

Dear Sir,

We have received Plan approval for construction of 400 kV D/C Akola-II to Akola-I line from your office vide letter under reference 2.

The construction work of line is completed under the conditions laid down in the plan approval and the line is ready for inspection.

The details of work are as below:

- | | |
|--|--|
| 1. Route Length | - 30.65 kms |
| 2. Ground Clearance | - 8.84 meters |
| 3. Type Structure | - Self-supporting/lattice type |
| 4. Type of Conductor | - ACSR Moose Conductor |
| 5. Conductor configuration tower | - Vertical |
| 6. Earthing details of tower | - Earthing drawings enclosed |
| 7. Size of Earthwire | - 7/3.66 sq.mm. GI Wire |
| 8. No. of Earthwire | - Two nos. |
| 9. Lightning Protection | - Two E/W are provided to protect the line from lightning |
| 10. Crossing of HV/EHV lines | - Crossing clearance will be as per the IE Rules |
| 11. PTCC approval | - PTCC approval received vide letter no.
IC/MBI/PTCC/MRA 1974 dated 06.11.2012 |
| 12. Railway NOC | - Railway NOC received vide letter no.
BSL/LD/OH/X-ing/400KV/258 dated 27.07.2012 |
| 13. Whether span is as per standard norm | - Span is as per standard norms |
| 14. Name of Contractor | - M/s. Gammon India Limited |
| 15. No. of Line Crossing | |

Sr.No	Level of Crossing	No. of Crossing	Remark
1	11 kV	16	As per the enclosed crossing clearance chart.
2	33 kV	1	
3	66 kV	2	
4	132 kV	2	
5	400 kV	1	
6	NH Crossing	1	
7	Railway Crossing	1	
	Total	24	

Corporate Office : 8th Floor, A - wing, Sambhav Building, Judges Bungalow Road, Bodakdev, Ahmedabad- 380015

MAHARASHTRA EASTERN GRID POWER TRANSMISSION COMPANY LIMITED

"Shree Jee House", 2nd Floor, Plot No: 39, Kotwal Nagar, Ring Road, Nagpur - 440022

Phone No. 0712-2289361

Fax No.0712-2420335

We have enclosed the following documents for your reference:

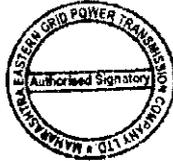
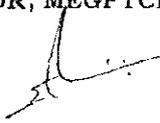
1. Manufacturer's Test Report for Tower Material, Conductor, Insulator & Hardware Fitting.
2. Electrical License of M/s.Gammon India Limited.
3. Crossing Clearance chart.
4. Line completion certificate.

It is requested to depute your representative for inspection of line and accord your approval for changing of line.

Thanking You.

Yours Faithfully,

FOR, MEGPTCL



Suresh G. Bire
Authorized Signatory

Enclosure: - As above.

Government of Maharashtra

Office of the Chief Engineer (Elec.),
P.W.D. Deptt., Govt. of Maharashtra,
Bandhkam Bhavan, 3rd floor,
Marzban Road, Fort,
Mumbai- 400 001.

Website : www.mahapwd.com

Telephone : (022) 22013415/16/17

Email : elmumbai.ce@mahapwd.com

Fax : (022) 22016900

No.CE(Elec.)Desk-1/1/728 / 2013

Date 24 MAY 2013

✓ To.

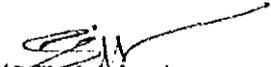
Maharashtra Eastern Grid Power Transmission Co. Ltd,
Shree jee House, Plot No.39, Kotwal Nagar,
Ring Road Nagpur.

Sub :- Final charging Permission for 400 KV D/C (Quad) Akola II S/Stn.
to Akola I S/stn Transmission Line.

Ref :- Letter No. MEGPTCL/NGP/MSETCL/400/600 Dated 12.04.2013

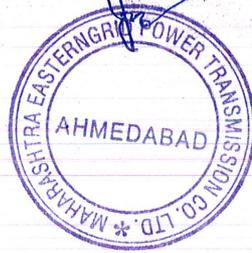
With reference to above, Final charging Permission for 400 KV D/C (Quad) Akola II S/Stn. to Akola I S/stn Transmission Line. here by accorded as per provision under rule no 63 of Indian Electricity Rules 1956.

The installation should be maintain under safe working condition.


(S.T. Valdekar)
Chief Engineer (Elec.)

Copy to: - Superintending Engineer Reg. Circle Amravati for information.

**Maharashtra Eastern Grid Power
Transmission Limited
Licensed Area of Transmission
Transmission License No. 1 of 2010
Business Plan Data Format**



Maharashtra Eastern Grid Power Transmission Limited
Transmission License No. 1 of 2010
765 kV Tiroda - Aurangabad Transmission System
Business Plan Formats - Transmission

S.No.	Title	Reference
1	Aggregate Revenue Requirement - Summary Sheet	Form 1
2	Summary of Operations and Maintenance Expenses	Form 2
3	O&M Expenditure -Second Control Period, Transmission Network Details	Form 2.1, 2.2
4	Employee Expenses for FY 2009-10 and FY 2010-11	Form 2.3
5	A&G Expenses for FY 2009-10 and FY 2010-11	Form 2.4
6	R&M Expenses for FY 2009-10 and FY 2010-12	Form 2.5
7	Capital Expenditure Plan	Form 3
8	Capitalisation Plan	Form 4
9	Assets & Depreciation	Form 5
10	Interest Expenses	Form 6
11	Other Expenses	Form 7
12	Return on Regulatory Equity	Form 8
13	Non-tariff Income	Form 9
14	Income Tax	Income Tax

Maharashtra Eastern Grid Power Transmission Limited
Transmission License No. 1 of 2010
765 kV Tiroda - Aurangabad Transmission System
Form 1: Aggregate Revenue Requirement - Summary Sheet

(Rs. Crore)

S.No.	Particulars	Reference	FY 2011-12	FY 2012-13	FY 2013-14	FY 2014-15	FY 2015-16
			Audited	Estimated			
1	Operation & Maintenance Expenses	Form 2	NA	NA	15.26	80.95	96.91
2	Depreciation Expenses	Form 5			46.11	242.36	276.67
3	Interest on Long-term Loan Capital	Form 6			59.04	337.29	362.72
4	Interest on Working Capital and on consumer security deposits	Form 6			3.72	19.22	21.58
5	Other Expenses	Form 7			0.50	0.75	1.00
6	Income Tax	Income Tax			10.89	57.17	65.25
7	Contribution to contingency reserves				13.32	26.45	26.45
8	Total Revenue Expenditure				148.82	764.21	850.58
9	Return on Equity Capital	Form 8			41.05	215.56	246.03
10	Aggregate Revenue Requirement				189.88	979.77	1,096.61
11	Less: Non Tariff Income	Form 9			-	0.48	1.92
12	Less: Income from Other Business				-	-	-
13	Net Aggregate Revenue Requirement				189.88	979.29	1,094.68

S.No.	Particulars	Reference	FY 2011-12	FY 2012-13	SET1			SET 2			SET 3		
			Audited	Estimated	FY 2013-14	FY 2014-15	FY 2015-16	FY 2013-14	FY 2014-15	FY 2015-16	FY 2013-14	FY 2014-15	FY 2015-16
1	Operation & Maintenance Expenses	Form 2	NA	NA	0.81	2.60	2.75	14.45	46.09	48.72	-	32.27	45.44
2	Depreciation Expenses	Form 5			1.84	5.56	5.56	44.26	133.52	133.52	-	103.29	137.59
3	Interest on Long-term Loan Capital	Form 6			2.33	7.54	7.03	56.70	183.28	171.12	-	146.47	184.57
4	Interest on Working Capital and on consumer security deposits	Form 6			0.15	0.46	0.45	3.57	10.56	10.40	-	8.20	10.73
5	Other Expenses	Form 7			0.02	0.02	0.02	0.48	0.41	0.48	-	0.32	0.50
6	Income Tax	Income Tax			0.43	1.30	1.30	10.46	31.54	31.54	-	24.33	32.41
7	Contribution to contingency reserves				0.53	0.53	0.53	12.79	12.79	12.79	-	13.14	13.14
8	Total Revenue Expenditure				6.12	18.00	17.63	142.70	418.19	408.57	-	328.02	424.38
9	Return on Equity Capital	Form 8			1.62	4.90	4.90	39.43	118.93	118.93	-	91.73	122.20
10	Aggregate Revenue Requirement				7.74	22.90	22.53	182.13	537.12	527.50	-	419.75	546.57
11	Less: Non Tariff Income	Form 9			-	0.02	0.06	-	0.46	1.39	-	-	0.48
12	Less: Income from Other Business				-	-	-	-	-	-	-	-	-
13	Net Aggregate Revenue Requirement				7.74	22.88	22.47	182.13	536.66	526.11	-	419.75	546.10

Maharashtra Eastern Grid Power Transmission Limited
Transmission License No. 1 of 2010
765 kV Tiroda - Aurangabad Transmission System
Form 2 : Operations and Maintenance Expenses

S.No.	Particulars	Ensuing years					Remarks
		FY 2011-12	FY 2012-13	FY 2013-14	FY 2014-15	FY 2015-16	
		Actual	Actual	Projected	Projected	Projected	
1	O&M Expenses			15.26	80.95	96.91	
2	Employee Expenses (net of Capitalisation)						
3	R&M Expenses (net of Capitalisation)						
4	A&G Expenses (net of Capitalisation)						
5	Total Operation & Maintenance Expenses (net of capitalisation)			15.26	80.95	96.91	

Maharashtra Eastern Grid Power Transmission Limited
Transmission License No. 1 of 2010
765 kV Tiroda - Aurangabad Transmission System

Form 2.1 : Operation and Maintenance Expenses

Set 1

S. No.	Particular	FY 2013-14			FY 2014-15			FY 2015-16			Remarks
		Opening	Closing	Average	Opening	Closing	Average	Opening	Closing	Average	
1	Ckt. Km. Basis										
a	<u>Ckt km length</u>										
	-765 kV	0	0	0	0	0	0	0	0	0	
	-400 kV	0	61.3	30.65	61.3	61.3	61.3	61.3	61.3	61.3	
b	<u>Applicable O&M cost Norm for ckt-km :- Rs Lakh / ckt-km</u>										
	-765 kV		0.83			0.88			0.93		
	-400 kV		0.59			0.63			0.66		
c	<u>O&M Expenses (ckt-km), Rs Crore</u>										
	-765 kV		0.00			0.00			0.00		
	-400 kV		0.12			0.39			0.40		
A	Sub-total		0.12			0.39			0.40		
2	Bay basis										
a	<u>Number of Bays</u>										
	-765 kV	0	0	0	0	0	0	0	0	0	
	-400 kV	0	2	1	2	2	2	2	2	2	
b	<u>Applicable O&M Cost Norm for Bays (Rs. Lakh / Bay)</u> <u>@ Rs Lakh per feeder bay</u>										
	-765 kV		146.68			155.07			163.94		
	-400 kV		104.78			110.78			117.11		
c	<u>O&M Expense (Bays), Rs Crore</u>										
	-765 kV		0.00			0.00			0.00		
	-400 kV		0.69			2.22			2.34		
B	Sub-total		0.69			2.22			2.34		
C	Total (A+B)		0.81			2.60			2.75		

Set 2

S. No.	Particular	FY 2013-14			FY 2014-15			FY 2015-16			Remarks
		Opening	Closing	Average	Opening	Closing	Average	Opening	Closing	Average	
1	Ckt. Km. Basis										
a	<u>Ckt km length</u>										
	-765 kV	0	630	315	630	630	630	630	630	630	
	-400 kV	0	0	0	0	0	0	0	0	0	
b	<u>Applicable O&M cost Norm for ckt-km :- Rs Lakh / ckt-km</u>										
	-765 kV		0.83			0.88			0.93		
	-400 kV		0.59			0.63			0.66		
c	<u>O&M Expenses (ckt-km), Rs Crore</u>										
	-765 kV		1.73			5.54			5.86		
	-400 kV		0.00			0.00			0.00		
A	Sub-total		1.73			5.54			5.86		
2	Bay basis										
a	<u>Number of Bays</u>										
	-765 kV	0	19	9.5	19	19	19	19	19	19	
	-400 kV	0	10	5	10	10	10	10	10	10	
b	<u>Applicable O&M Cost Norm for Bays (Rs. Lakh / Bay)</u> <u>@ Rs Lakh per feeder bay</u>										
	-765 kV		146.68			155.07			163.94		
	-400 kV		104.78			110.78			117.11		
c	<u>O&M Expense (Bays), Rs Crore</u>										
	-765 kV		9.24			29.46			31.15		
	-400 kV		3.47			11.08			11.71		
B	Sub-total		12.71			40.54			42.86		
C	Total (A+B)		14.45			46.09			48.72		

Set 3

S. No.	Particular	FY 2013-14			FY 2014-15			FY 2015-16			Remarks
		Opening	Closing	Average	Opening	Closing	Average	Opening	Closing	Average	
		1	Ckt. Km. Basis								
a	Ckt km length										
	-765 kV	0	0	0	0	630	315	630	630	630	
	-400 kV	0	0	0	0	0	0	0	0	0	
b	Applicable O&M cost Norm for ckt-km :- Rs Lakh / ckt-km										
	-765 kV		0.83			0.88			0.93		
	-400 kV		0.59			0.63			0.66		
c	O&M Expenses (ckt-km), Rs Crore										
	-765 kV		0.00			4.16			5.86		
	-400 kV		0.00			0.00			0.00		
A	Sub-total		0.00			4.16			5.86		
2	Bay basis										
a	Number of Bays										
	-765 kV	0	0	0	0	17	8.5	17	17	17	
	-400 kV	0	0	0	0	10	5	10	10	10	
b	Applicable O&M Cost Norm for Bays (Rs. Lakh / Bay) @ Rs Lakh per feeder bay										
	-765 kV		146.68			155.07			163.94		
	-400 kV		104.78			110.78			117.11		
c	O&M Expense (Bays), Rs Crore										
	-765 kV		0.00			19.79			27.87		
	-400 kV		0.00			8.32			11.71		
B	Sub-total		0.00			28.11			39.58		
C	Total (A+B)		0.00			32.27			45.44		

Maharashtra Eastern Grid Power Transmission Limited
 Transmission License No. 1 of 2010
 765 kV Tiroda - Aurangabad Transmission System

Form 2.2: Transmission Network Details

Network details

Set 1

S.No.	Particulars	Previous Year	Current Year	Ensuing Years					Remarks
		FY 10	FY 11	FY 12	FY 13	FY 14	FY 15	FY 16	
	Transmission Line Length (Ckt. Km.)								
A	HVDC								
	765 KV								
	400 KV					61.3	61.3	61.3	
	>66 KV and <400 KV								
	66 KV and less								
B	No of Substations								
	HVDC								
	765 KV								
	400 KV								
	220 KV								
	132 KV								
	66 KV and less								
C	Total No of Bays								
	765 KV								
	400 KV					2.0	2.0	2.0	
	>66 KV and <400 KV								
	66 KV and less								
D	Transformation Capacity								
	765 KV								
	400 KV								
	220 KV								
	132 KV								
	66 KV and less								

Set 2

S.No.	Particulars	Previous Year	Current Year	Ensuing Years					Remarks
		FY 10	FY 11	FY 12	FY 13	FY 14	FY 15	FY 16	
	Transmission Line Length (Ckt. Km.)								
A	HVDC								
	765 KV					630	630	630	
	400 KV								
	>66 KV and <400 KV								
	66 KV and less								
B	No of Substations								
	HVDC								
	765 KV								
	400 KV								
	220 KV								
	132 KV								
	66 KV and less								
C	Total No of Bays								
	765 KV					19	19	19	
	400 KV					10	10	10	
	>66 KV and <400 KV								
	66 KV and less								
D	Transformation Capacity								
	765 KV								
	400 KV								
	220 KV								
	132 KV								
	66 KV and less								

Set 3

S.No.	Particulars	Previous Year	Current Year	Ensuing Years					Remarks	
		FY 10	FY 11	FY 12	FY 13	FY 14	FY 15	FY 16		
A	Transmission Line Length (Ckt. Km.)	NA	NA							
	HVDC									
	765 KV							630	630	
	400 KV									
	>66 KV and <400 KV									
	66 KV and less									
B	No of Substations									
	HVDC									
	765 KV									
	400 KV									
	220 KV									
	132 KV									
	66 KV and less									
C	Total No of Bays									
	765 KV						17	17		
	400 KV						10	10		
	>66 KV and <400 KV									
	66 KV and less									
D	Transformation Capacity									
	765 KV									
	400 KV									
	220 KV									
	132 KV									
	66 KV and less									

Maharashtra Eastern Grid Power Transmission Limited
Transmission License No. 1 of 2010
765 kV Tiroda - Aurangabad Transmission System

Form 2.3 : Employee Expenses for FY 2009-10 and FY 2010-11

(Rs. Crore)

S.No.	Particulars	FY 2009-10	FY 2010-11		
		(Audited)	Apr-Dec (Actuals)	Jan-Mar (Estimated)	Apr - Mar (Estimated)
		(a)	(b)	(c)	(d)
1	Basic Salary	NA	NA	NA	NA
2	Dearness Allowance (DA)				
3	House Rent Allowance				
4	Conveyance Allowance				
5	Leave Travel Allowance				
6	Earned Leave Encashment				
7	Other Allowances				
8	Medical Reimbursement				
9	Overtime Payment				
10	Bonus/Ex-Gratia Payments				
11	Interim Relief / Wage Revision				
12	Staff welfare expenses				
13	VRS Expenses/Retrenchment Compensation				
14	Commission to Directors				
15	Training Expenses				
16	Payment under Workmen's Compensation Act				
17	Net Employee Costs				
18	Terminal Benefits				
18.1	Provident Fund Contribution				
18.2	Provision for PF Fund				
18.3	Pension Payments				
18.4	Gratuity Payment				
19	Others				
20	Gross Employee Expenses				
21	Less: Expenses Capitalised				
21	Net Employee Expenses				

Maharashtra Eastern Grid Power Transmission Limited
Transmission License No. 1 of 2010
765 kV Tiroda - Aurangabad Transmission System

Form 2.4 : Administration & General Expenses for FY 2009-10 and FY 2010-11

(Rs. Crore)

S.No.	Particulars	FY 2009-10	FY 2010-11		
		(Audited)	Apr-Dec (Actuals)	Jan-Mar (Estimated)	Apr - Mar (Estimated)
		(a)	(b)	(c)	(d)
1	Rent Rates & Taxes	NA	NA	NA	NA
2	Insurance				
3	Telephone & Postage, etc.				
4	Legal charges & Audit fee				
5	Professional, Consultancy, Technical fee				
6	Conveyance & Travel				
7	Electricity charges				
8	Water charges				
9	Security arrangements				
10	Fees & subscription				
11	Books & periodicals				
12	Computer Stationery				
13	Printing & Stationery				
14	Advertisements				
15	Purchase Related Advertisement Expenses				
16	Contribution/Donations				
17	License Fee and other related fee				
18	Vehicle Running Expenses Truck / Delivery Van				
19	Vehicle Hiring Expenses Truck / Delivery Van				
20	Cost of services procured				
21	Outsourcing of metering and billing system				
22	Freight On Capital Equipments				
23	V-sat, Internet and related charges				
24	Training				
25	Bank Charges				
26	Miscellaneous Expenses				
27	Office Expenses				
28	Others				
29	Gross A&G Expenses				
30	Less: Expenses Capitalised				
31	Net A&G Expenses				

Maharashtra Eastern Grid Power Transmission Limited
Transmission License No. 1 of 2010
765 kV Tiroda - Aurangabad Transmission System

Form 2.5 : Repair and Maintenance Expenses for FY 2009-10 and FY 2010-11

(Rs. Crore)

S.No.	Particulars	FY 2009-10	FY 2010-11		
		(Audited)	Apr-Dec (Actuals)	Jan-Mar (Estimated)	Apr - Mar (Estimated)
		(a)	(b)	(c)	(d)
1	Plant & Machinery	NA	NA	NA	NA
2	Buildings				
3	Civil Works				
4	Hydraulic Works				
5	Lines & Cable Networks				
6	Vehicles				
7	Furniture & Fixtures				
8	Office Equipment				
9	Gross R&M Expenses				
10	Less: Expenses Capitalised				
11	Net R&M Expenses				

Maharashtra Eastern Grid Power Transmission Limited
Transmission License No. 1 of 2010
765 kV Tiroda - Aurangabad Transmission System
Form 3: Capital Expenditure Plan

Project Details

(Rs. Crore)

Project Code	Project Title	Project Start Date			Project Completion date (Scheduled)			Cost of the Project			
		Original	Revised	Actual	Original	Revised	Actual	Original	Actual / Revised	Approved	Difference = Actual - Approved
765 kV Tiroda - Aurangabad Transmission System											
a) DPR Schemes											
<u>(i) In-principle approved by MERC</u>											
Transmission License No. 1 of 2010	Set 1								105.30		
	Set 2						4,721.88		2,557.74	4,721.88	569.04
	Set 3								2,627.88		
...											
<u>(ii) Yet to receive in-principle MERC approval</u>											
...											
b) Non-DPR Schemes											
...											
TOTAL							4,721.88	5,290.92	4,721.88	569.04	

Project Details

(Rs. Crore)

Project Number	Project Title	FY 2011-12	FY 2012-13		Ensuing Years		
		Till the beginning of the year	Actual Incurred during the year	Estimated	FY2013-14	FY2014-15	FY2015-16
a) DPR Schemes							
<u>(i) In-principle approved by MERC</u>							
Transmission License No. 1 of 2010		1,515.47		1,405.57	1,970.83	399.05	
...							
<u>(ii) Yet to receive in-principle MERC approval</u>							
...							
b) Non-DPR Schemes							
...							
TOTAL		1515.47	-	1405.57	1970.83	399.05	-

Maharashtra Eastern Grid Power Transmission Limited
 Business Plan Formats - Transmission
 Form 3: Capital Expenditure Plan

Financing Plan

(Rs. Crore)

Project Number	SOURCE OF FINANCING FOR CAPITAL EXPENDITURE	Debt	Interest Rate (% p.a.)	Tenure of Loan (years)	Moratorium Period (years)	Loan Source
	Internal Accruals	Loan Amount				
a) DPR Schemes						
<u>(i) In-principle approved by MERC</u>						
	Transmission License No. 1 of 2010					
Domestic Loan		3254 Cr INR	Base rates of ICICI/ SBI + 2.50% p.a.	10	Repayment starting from 30th November 2013	ICICI Bank (Lead arranger)
Foreign currency loan		100 Million USD	4.2% + 6 ML	8	Repayment starting from 30th June 2014	ICICI BANK (Lead arranger)
<u>(ii) Yet to receive in-principle MERC approval</u>						
...						
b) Non-DPR Schemes						
...						
TOTAL						

Maharashtra Eastern Grid Power Transmission Limited
Transmission License No. 1 of 2010
765 kV Tiroda - Aurangabad Transmission System
Form 4: Capitalisation Plan

Project Details

(Rs. Crore)

S.No	Project Code	Project Title	Debt Equity Ratio	Date of Completion	Benefits in Quantified Terms	Capital Expenditure						
						Actual	Actual	Actual	Projected	Projected	Projected	Projected
						FY 10	FY 11	FY 12	FY 13	FY 14	FY 15	FY 16
FY 2011-12												
a) DPR Schemes												
<i>(i) In-principle approved by MERC</i>												
	765 kV Tiroda - Aurangabad Transmission System		Debt - 70% Equity - 30%			0.05	1,515.42	1,405.57	1,970.83	399.05		
...												
<i>(ii) Yet to receive in-principle MERC approval</i>												
b) Non-DPR Schemes												
...												
TOTAL												
						-	0.05	1,515.42	1,405.57	1,970.83	399.05	-

(Rs. Crore)

S.No	Project Code	Project Title	Physical Progress (%)							Capitalisation							
			Actual	Estimated	Projected	Projected	Projected	Projected	Projected	Actual	Estimated	Projected	Projected	Projected	Projected		
			FY 10	FY 11	FY 12	FY 13	FY 14	FY 15	FY 16	FY 10	FY 11	FY 12	FY 13	FY 14	FY 15	FY 16	
FY 2011-12																	
a) DPR Schemes																	
<i>(i) In-principle approved by MERC</i>																	
	Transmission No. 1 of 2010	Set 1													105.30		
		Set 2													2557.74		
		Set 3														2,627.88	
<i>(ii) Yet to receive in-principle MERC approval</i>																	
...																	
b) Non-DPR Schemes																	
...																	
TOTAL																	
															2,663.04	2,627.88	-

Maharashtra Eastern Grid Power Transmission Limited
Transmission License No. 1 of 2010
765 kV Tiroda - Aurangabad Transmission System
Form 5: Assets & Depreciation

(A) Gross Fixed Assets

(Rs Crores)

S.No.	Particulars	FY 2012-13				FY 2013-14			
		Projected				Projected			
		Balance at the beginning of the year	Additions during the year	Retirement of assets during the year	Balance at the end of the year	Balance at the beginning of the year	Additions during the year	Retirement of assets during the year	Balance at the end of the year
1	Set 1					-	105.30	-	105.30
2	Set 2					-	2,557.74	-	2,557.74
3	Set 3					-	-	-	-
4	Total					-	2,663.04	-	2,663.04

S.No.	Particulars	FY 2014-15				FY 2015-16			
		Projected				Projected			
		Balance at the beginning of the year	Additions during the year	Retirement of assets during the year	Balance at the end of the year	Balance at the beginning of the year	Additions during the year	Retirement of assets during the year	Balance at the end of the year
1	Set 1	105.30	-	-	105.30	105.30	-	-	105.30
2	Set 2	2,557.74	-	-	2,557.74	2,557.74	-	-	2,557.74
3	Set 3	-	2,627.88	-	2,627.88	2,627.88	-	-	2,627.88
4	Total	2,663.04	2,627.88	-	5,290.92	5,290.92	-	-	5,290.92

Depreciation rate	5.28%
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(B) Depreciation

S.No.	Particulars	FY 2013-14			FY 2014-15			FY 2015-16					
		Projected			Projected			Projected					
		Accumulated depreciation at the beginning of the year	Additions during the year	Withdrawals during the year	Accumulated depreciation at the end of the year	Accumulated depreciation at the beginning of the year	Additions during the year	Withdrawals during the year	Accumulated depreciation at the end of the year	Accumulated depreciation at the beginning of the year	Additions during the year	Withdrawals during the year	Accumulated depreciation at the end of the year
1	Set 1	-	1.84	-	1.84	1.84	5.56	-	7.40	7.40	5.56	-	12.96
2	Set 2	-	44.26	-	44.26	44.26	133.52	-	177.78	177.78	133.52	-	311.30
3	Set 3	-	-	-	-	-	103.29	-	103.29	103.29	137.59	-	240.88
4	Total	-	46.11	-	46.11	46.11	242.36	-	288.47	288.47	276.67	-	565.14

Note: Value of land has been subtracted for depreciation computation

(D) Net Fixed Assets

S.No.	Particulars	FY 2013-14			FY 2014-15			FY 2015-16					
		Projected			Projected			Projected					
		Balance at the beginning of the year	Additions during the year	Retirement of assets during the year	Balance at the end of the year	Balance at the beginning of the year	Additions during the year	Retirement of assets during the year	Balance at the end of the year	Balance at the beginning of the year	Additions during the year	Retirement of assets during the year	Balance at the end of the year
	Set 1	-	103.46	-	103.46	103.46	(5.56)	-	97.90	97.90	(5.56)	-	92.34
	Set 2	-	2,513.48	-	2,513.48	2,513.48	(133.52)	-	2,379.96	2,379.96	(133.52)	-	2,246.44
	Set 3	-	-	-	-	-	2,524.59	-	2,524.59	2,524.59	(137.59)	-	2,387.00
	Total	-	2,616.94	-	2,616.94	2,616.94	2,385.51	-	5,002.45	5,002.45	(276.67)	-	4,725.78

Land component of GFA	
Set 1	0
Set 2	29
Set 3	22

* Land component value of GFA has not been considered to compute yearly depreciation

Maharashtra Eastern Grid Power Transmission Limited
Transmission License No. 1 of 2010
765 kV Tiroda - Aurangabad Transmission System
Form 6:

Exchange rate (Rs/Dollar) as on 30-Aug-2013 65.7050

Long-term Loans

Actual Loan Details

S.No.	Source of Loan	FY 2010-11	FY 2011-12	FY 2012-13	FY 2013-14	FY 2014-15	FY 2015-16
		Audited	Estimated	Projected	Projected	Projected	Projected
1	Loan 1: RTL						
	Opening Balance of Loan			350.00	1,124.04	2,882.10	3,075.72
	Addition during the year			774.04	1,799.80	329.80	-
	Loan Repayment during the year			-	41.74	136.18	203.90
	Closing Balance of Loan			1,124.04	2,882.10	3,075.72	2,871.82
	Applicable Interest Rate (%)			12.25%	12.58%	12.33%	12.33%
2	Loan 2 : ECB USD 100 Million						
	Opening Balance of Loan			100.00	100.00	100.00	92.65
	Addition during the year			-	-	-	-
	Loan Repayment during the year			-	-	7.35	7.35
	Closing Balance of Loan			100.00	100.00	92.65	85.30
	Applicable Interest Rate (%) (6 ML + 4.2% p.a.)			4.70%	4.70%	4.70%	4.70%
3	Weighted average interest rate			7.32%	9.67%	10.91%	11.07%

Consolidated interest expense

S.No.	Particulars	FY 2013-14	FY 2014-15	FY 2015-16
		Projected	Projected	Projected
1	Debt at the beginning of the year	-	1,818.02	3,415.17
2	Capitalization during the year	2,663.04	2,627.88	-
3	Debt portion of capitalisation during the year	1,864.13	1,839.51	-
4	Reduction in Loan Capital on account of retirement / replacement of assets	-	-	-
5	Repayment of loan	46.11	242.36	276.67
6	Closing balance of debt	1,818.02	3,415.17	3,138.50
7	Interest Computation			
8	Weighted average interest rate	9.67%	10.91%	11.07%
9	Total Interest expense	59.04	337.29	362.72

Set 1

S.No.	Particulars	FY 2013-14	FY 2014-15	FY 2015-16
		Projected	Projected	Projected
Number of days of operation		121	365	365
1	Debt at the beginning of the year	-	71.87	66.31
2	Capitalization during the year	105.30	-	-
3	Debt portion of capitalisation during the year	73.71	-	-
4	Reduction in Loan Capital on account of retirement / replacement of assets	-	-	-
5	Repayment of loan	1.84	5.56	5.56
6	Closing balance of debt	71.87	66.31	60.75
7	Interest Computation			
8	Weighted average interest rate	9.67%	10.91%	11.07%
9	Total Interest expense	2.33	7.54	7.03

Set 2

S.No.	Particulars	FY 2013-14	FY 2014-15	FY 2015-16
		Projected	Projected	Projected
Number of days of operation		121	365	365
1	Debt at the beginning of the year	-	1,746.16	1,612.64
2	Capitalization during the year	2,557.74	-	-
3	Debt portion of capitalisation during the year	1,790.42	-	-
4	Reduction in Loan Capital on account of retirement / replacement of assets	-	-	-
5	Repayment of loan	44.26	133.52	133.52
6	Closing balance of debt	1746.16	1612.64	1479.12
7	Interest Computation			
8	Weighted average interest rate	9.67%	10.91%	11.07%
9	Total Interest expense	56.70	183.28	171.12

Set 3

S.No.	Particulars	FY 2013-14	FY 2014-15	FY 2015-16
		Projected	Projected	Projected
Number of days of operation		0	274	365
1	Debt at the beginning of the year	-	-	1,736.23
2	Capitalization during the year	-	2,627.88	-
3	Debt portion of capitalisation during the year	-	1,839.51	-
4	Reduction in Loan Capital on account of retirement / replacement of assets	-	-	-
5	Repayment of loan	-	103.29	137.59
6	Closing balance of debt	-	1736.23	1598.64
7	Interest Computation			
8	Weighted average interest rate	9.67%	10.91%	11.07%
9	Total Interest expense	-	146.47	184.57

Maharashtra Eastern Grid Power Transmission Limited
Transmission License No. 1 of 2010
765 kV Tiroda - Aurangabad Transmission System
Form 6: Interest Expenses

Working Capital

Consolidated interest on working capital

(Rs. Crore)

Sl. No	Particulars	FY 2011-12	FY 2012-13	FY 2013-14	FY 2014-15	FY 2015-16
		Audited	Estimated			
1	Computation of Working Capital					
1.1	One-twelfth of the amount of Operations and Maintenance Expenses			3.84	7.64	8.08
1.2	One-twelfth of the sum of the book value of stores, materials and supplies			2.22	4.41	4.41
1.3	One and a half months of the expected revenue from transmission charges at the prevailing tariff:			71.60	139.84	136.84
	Less:					
1.4	Amount of Security Deposit					
a	From Transmission System users			-	-	-
	Total Working Capital			77.65	151.88	149.32
2	Computation of working capital interest					
2.1	Rate of Interest (% p.a.)					
2.2	Interest on Working Capital			3.72	19.22	21.58
3	Interest on Security Deposit					
3.1	Rate of Interest (% p.a.)			-	-	-
3.2	Interest on Security Deposit			-	-	-

SET 1

Sl. No	Particulars	FY 2011-12	FY 2012-13	FY 2013-14	FY 2014-15	FY 2015-16
		Audited	Estimated			
1	Computation of Working Capital					
1.1	One-twelfth of the amount of Operations and Maintenance Expenses			0.20	0.22	0.23
1.2	One-twelfth of the sum of the book value of stores, materials and supplies			0.09	0.09	0.09
1.3	One and a half months of the expected revenue from transmission charges at the prevailing tariff:			2.92	2.86	2.81
	Less:					
1.4	Amount of Security Deposit					
a	From Transmission System users			-	-	-
	Total Working Capital			3.21	3.16	3.13
2	Computation of working capital interest					
2.1	Rate of Interest (% p.a.)			14.45%	14.45%	14.45%
2.2	Interest on Working Capital			0.15	0.46	0.45
3	Interest on Security Deposit					
3.1	Rate of Interest (% p.a.)			-	-	-
3.2	Interest on Security Deposit			-	-	-

SET 2

Sl. No	Particulars	FY 2011-12	FY 2012-13	FY 2013-14	FY 2014-15	FY 2015-16
		Audited	Estimated			
1	Computation of Working Capital					
1.1	One-twelfth of the amount of Operations and Maintenance Expenses			3.63	3.84	4.06
1.2	One-twelfth of the sum of the book value of stores, materials and supplies			2.13	2.13	2.13
1.3	One and a half months of the expected revenue from transmission charges at the prevailing tariff:			68.68	67.08	65.76
	<i>Less:</i>					
1.4	Amount of Security Deposit					
a	From Transmission System users			-	-	-
	Total Working Capital			74.44	73.05	71.96
2	Computation of working capital interest					
2.1	Rate of Interest (% p.a.)			14.45%	14.45%	14.45%
2.2	Interest on Working Capital			3.57	10.56	10.40
3	Interest on Security Deposit					
3.1	Rate of Interest (% p.a.)			-	-	-
3.2	Interest on Security Deposit			-	-	-

SET 3

Sl. No	Particulars	FY 2011-12	FY 2012-13	FY 2013-14	FY 2014-15	FY 2015-16
		Audited	Estimated			
1	Computation of Working Capital					
1.1	One-twelfth of the amount of Operations and Maintenance Expenses			-	3.58	3.79
1.2	One-twelfth of the sum of the book value of stores, materials and supplies			-	2.19	2.19
1.3	One and a half months of the expected revenue from transmission charges at the prevailing tariff:			-	69.89	68.26
	<i>Less:</i>					
1.4	Amount of Security Deposit					
a	From Transmission System users			-	-	-
	Total Working Capital			-	75.67	74.24
2	Computation of working capital interest					
2.1	Rate of Interest (% p.a.)			14.45%	14.45%	14.45%
2.2	Interest on Working Capital			-	8.20	10.73
3	Interest on Security Deposit					
3.1	Rate of Interest (% p.a.)			-	-	-
3.2	Interest on Security Deposit			-	-	-

Maharashtra Eastern Grid Power Transmission Limited
Transmission License No. 1 of 2010
765 kV Tiroda - Aurangabad Transmission System
Form 7: Other Expenses

Total Other expense (Rs. Crore)

S.No.	Particulars	Ensuing Years					Remarks
		FY 2011-12	FY2012-13	FY 2013-14	FY 2014-15	FY 2015-16	
		Projected	Projected	Projected	Projected	Projected	
1	Corporate Social Responsibility			0.50	0.75	1.00	
	Total	-	-	0.50	0.75	1.00	

SET 1

S.No.	Particulars	Ensuing Years					Remarks
		FY 2011-12	FY2012-13	FY 2013-14	FY 2014-15	FY 2015-16	
		Projected	Projected	Projected	Projected	Projected	
1	Corporate Social Responsibility			0.02	0.02	0.02	
	Total	-	-	0.02	0.02	0.02	

SET 2

S.No.	Particulars	Ensuing Years					Remarks
		FY 2011-12	FY2012-13	FY 2013-14	FY 2014-15	FY 2015-16	
		Projected	Projected	Projected	Projected	Projected	
1	Corporate Social Responsibility			0.48	0.41	0.48	
	Total	-	-	0.48	0.41	0.48	

SET 3

S.No.	Particulars	Ensuing Years					Remarks
		FY 2011-12	FY2012-13	FY 2013-14	FY 2014-15	FY 2015-16	
		Projected	Projected	Projected	Projected	Projected	
1	Corporate Social Responsibility			-	0.32	0.50	
	Total	-	-	-	0.32	0.50	

Maharashtra Eastern Grid Power Transmission Limited
Transmission License No. 1 of 2010
765 kV Tiroda - Aurangabad Transmission System
Form 8: Return on Regulatory Equity

(Rs Crores)

S.No.	Particulars	Reference	FY 2013-14	FY 2014-15	FY 2015-16
			Projected	Projected	Projected
1	Regulatory Equity at the beginning of the year		-	798.91	1,587.27
2	Capitalization during the year		2,663.04	2,627.88	-
3	Equity portion of capitalisation during the year		798.91	788.36	-
4	Consumer Contribution and Grants used during the year for Capitalisation		-	-	-
5	Reduction in Equity Capital on account of retirement / replacement of assets		-	-	-
6	Regulatory Equity at the end of the year	(1)+(3)-(4)-(5)	798.91	1,587.27	1,587.27
Return Computation					
7	Return on Regulatory Equity at the beginning of the year	15.5%*[(1)-(4)]	-	123.83	246.03
8	Return on Equity portion of capitalization during the year	15.5% on prorata basis	41.05	91.73	-
9	Total Return on Regulatory Equity	(7)+(8)	41.05	215.56	246.03

SET 1

S.No.	Particulars	Reference	FY 2013-14	FY 2014-15	FY 2015-16
			Projected	Projected	Projected
1	Regulatory Equity at the beginning of the year		-	31.59	31.59
2	Capitalization during the year		105.30	-	-
3	Equity portion of capitalisation during the year		31.59	-	-
4	Consumer Contribution and Grants used during the year for Capitalisation		-	-	-
5	Reduction in Equity Capital on account of retirement / replacement of assets		-	-	-
6	Regulatory Equity at the end of the year	(1)+(3)-(4)-(5)	31.59	31.59	31.59
Return Computation					
7	Return on Regulatory Equity at the beginning of the year	15.5%*[(1)-(4)]	-	4.90	4.90
8	Return on Equity portion of capitalization during the year	15.5% on prorata basis	1.62	-	-
9	Total Return on Regulatory Equity	(7)+(8)	1.62	4.90	4.90

SET 2

S.No.	Particulars	Reference	FY 2013-14	FY 2014-15	FY 2015-16
			Projected	Projected	Projected
1	Regulatory Equity at the beginning of the year		-	767.32	767.32
2	Capitalization during the year		2,557.74	-	-
3	Equity portion of capitalisation during the year		767.32	-	-
4	Consumer Contribution and Grants used during the year for Capitalisation		-	-	-
5	Reduction in Equity Capital on account of retirement / replacement of assets		-	-	-
6	Regulatory Equity at the end of the year	(1)+(3)-(4)-(5)	767.32	767.32	767.32
Return Computation					
7	Return on Regulatory Equity at the beginning of the year	15.5%*[(1)-(4)]	-	118.93	118.93
8	Return on Equity portion of capitalization during the year	15.5% on prorata basis	39.43	-	-
9	Total Return on Regulatory Equity	(7)+(8)	39.43	118.93	118.93

SET 3

S.No.	Particulars	Reference	FY 2013-14	FY 2014-15	FY 2015-16
			Projected	Projected	Projected
1	Regulatory Equity at the beginning of the year		-	-	788.36
2	Capitalization during the year		-	2,627.88	-
3	Equity portion of capitalisation during the year		-	788.36	-
4	Consumer Contribution and Grants used during the year for Capitalisation		-	-	-
5	Reduction in Equity Capital on account of retirement / replacement of assets		-	-	-
6	Regulatory Equity at the end of the year	(1)+(3)-(4)-(5)	-	788.36	788.36
Return Computation					
7	Return on Regulatory Equity at the beginning of the year	15.5%*[(1)-(4)]	-	-	122.20
8	Return on Equity portion of capitalization during the year	15.5% on prorata basis	-	91.73	-
9	Total Return on Regulatory Equity	(7)+(8)	-	91.73	122.20

Maharashtra Eastern Grid Power Transmission Limited
Transmission License No. 1 of 2010
765 kV Tiroda - Aurangabad Transmission System
Form 9: Non-tariff Income

Consolidated Non Tariff Income

(Rs. Crore)

S.No.	Particulars	Reference	Previous Year (n-1)	Current Year (n)	FY2013-14 Projected	FY2014-15 Projected	FY2015-16 Projected	Remarks
			FY2011-12 Audited	FY2012-13 Estimated				
			1	Rents				
2	Other/Miscellaneous receipts				-	-	-	
3	Interest on Contingency Reserve Investments				-	0.48	1.92	
4	Interest on Other Investments				-	-	-	
5	Ancillary and Incidental Income				-	-	-	
6	Interest on staff loans & Advances				-	-	-	
7	Interest on advances to suppliers				-	-	-	
8	Sale of Scrap				-	-	-	
9	Royalty				-	-	-	
10	Gain/ Loss on account of Foreign exchange rate variation				-	-	-	
					-	-	-	
	Total				-	0.48	1.92	

Particulars	FY 14	FY 15	FY 16
Opening Balance of Contingency Reserve	0.00	13.32	39.77
Addition	13.32	26.45	26.45
Closing Balance of Contingency Reserve	13.32	39.77	66.22
Investment out of contingency reserve-opening balance	0.00	0.00	13.32
Investment out of contingency reserve-addition	0.00	13.32	26.45
Investment out of contingency reserve-closing balance	0.00	13.32	39.77
Average	0.00	6.66	26.54
Interest Rate	7.25%	7.25%	7.25%
Interest Income	0.00	0.48	1.92

SET 1

(Rs. Crore)

S.No.	Particulars	Reference	Previous Year (n-1)	Current Year (n)	FY2013-14 Projected	FY2014-15 Projected	FY2015-16 Projected	Remarks
			FY2011-12 Audited	FY2012-13 Estimated				
			1	Rents				
2	Other/Miscellaneous receipts							
3	Interest on Contingency Reserve Investments				-	0.02	0.06	
4	Interest on Other Investments							
5	Ancillary and Incidental Income							
6	Interest on staff loans & Advances							
7	Interest on advances to suppliers							
8	Sale of Scrap							
9	Royalty							
10	Gain/ Loss on account of Foreign exchange rate variation							
	Total				-	0.02	0.06	

Particulars	FY 14	FY 15	FY 16
Opening Balance of Contingency Reserve	0.00	0.53	1.05
Addition	0.53	0.53	0.53
Closing Balance of Contingency Reserve	0.53	1.05	1.58
Investment out of contingency reserve-opening balance	0.00	0.00	0.53
Investment out of contingency reserve-addition	0.00	0.53	0.53
Investment out of contingency reserve-closing balance	0.00	0.53	1.05
Average	0.00	0.26	0.79
Interest Rate	7.25%	7.25%	7.25%
Interest Income	0.00	0.02	0.06

SET 2

(Rs. Crore)

S.No.	Particulars	Reference	Previous Year (n-1)	Current Year (n)	FY2013-14 Projected	FY2014-15 Projected	FY2015-16 Projected	Remarks
			FY2011-12 Audited	FY2012-13 Estimated				
			1	Rents				
2	Other/Miscellaneous receipts							
3	Interest on Contingency Reserve Investments				-	0.46	1.39	
4	Interest on Other Investments							
5	Ancillary and Incidental Income							
6	Interest on staff loans & Advances							
7	Interest on advances to suppliers							
8	Sale of Scrap							
9	Royalty							
10	Gain/ Loss on account of Foreign exchange rate variation							
	Total				-	0.46	1.39	

Particulars	FY 14	FY 15	FY 16
Opening Balance of Contingency Reserve	0.00	12.79	25.58
Addition	12.79	12.79	12.79
Closing Balance of Contingency Reserve	12.79	25.58	38.37
Investment out of contingency reserve-opening balance	0.00	0.00	12.79
Investment out of contingency reserve-addition	0.00	12.79	12.79
Investment out of contingency reserve-closing balance	0.00	12.79	25.58
Average	0.00	6.39	19.18
Interest Rate	7.25%	7.25%	7.25%
Interest Income	0.00	0.46	1.39

Maharashtra Eastern Grid Power Transmission Limited
Transmission License No. 1 of 2010
765 kV Tiroda - Aurangabad Transmission System
Income Tax Expenses

Calculation of IT

S.No.	Particulars	FY 2011-12	FY2012-13	FY 2013-14	FY 2014-15	FY 2015-16
		Audited	Estimated	Projected	Projected	Projected
1	Regulated PBT (Equivalent to ROE)			41.05	215.56	246.03
2	MAT Rate			20.96%	20.96%	20.96%
3	Grossed up ROE			51.94	272.73	311.27
4	Income Tax			10.89	57.17	65.25

SET 1

S.No.	Particulars	FY 2011-12	FY2012-13	FY 2013-14	FY 2014-15	FY 2015-16
		Audited	Estimated	Projected	Projected	Projected
1	Regulated PBT (Equivalent to ROE)			1.62	4.90	4.90
2	MAT Rate			20.96%	20.96%	20.96%
3	Grossed up ROE			2.05	6.19	6.19
4	Income Tax			0.43	1.30	1.30

SET 2

S.No.	Particulars	FY 2011-12	FY2012-13	FY 2013-14	FY 2014-15	FY 2015-16
		Audited	Estimated	Projected	Projected	Projected
1	Regulated PBT (Equivalent to ROE)			39.43	118.93	118.93
2	MAT Rate			20.96%	20.96%	20.96%
3	Grossed up ROE			49.88	150.48	150.48
4	Income Tax			10.46	31.54	31.54

SET 3

S.No.	Particulars	FY 2011-12	FY2012-13	FY 2013-14	FY 2014-15	FY 2015-16
		Audited	Estimated	Projected	Projected	Projected
1	Regulated PBT (Equivalent to ROE)			-	91.73	122.20
2	MAT Rate			20.96%	20.96%	20.96%
3	Grossed up ROE			-	116.06	154.60
4	Income Tax			-	24.33	32.41