



4th September, 2015
CREG/MUM/MERC/15/246

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

Dear Sir,

Subject: Network Rollout Scenarios

Ref: Case 182 of 2014

This has reference to the Network Rollout Plan submitted post the judgment of the Hon'ble ATE in Appeal 246 of 2012 dated 28th November, 2014 and the Hearings held in the matter in MERC.

During the Hearing held on 12th August, 2015, the Hon'ble Commission had directed the Distribution Utilities to submit Situation specific scenarios for network laying.

Further, the Hon'ble Commission had specified the following in the Daily Order regarding Scenarios for Network Development

The Commission opined that the consumers' choice and reliability of supply is paramount objective. Modalities of laying the network need to be decided in such manner that it fulfils the above objective. While doing so, if necessary, economics of operations needs to be taken into consideration. There can be various scenarios within the framework of ATE's Judgment for providing supply on own wires or other Licensees' wires. Such scenarios need to be further developed depending upon the availability of existing network and its reliability.

In line with the directives of the Hon'ble Commission, we are submitting the scenarios for Network development after analysing the Reliability related data of existing network was made available from R-infra.

We request the Hon'ble Commission to consider this submission for the Network Rollout Plan.

We trust the same is in order.

Yours faithfully,

Bhaskar Sarkar
4/9/15.

f Bhaskar Sarkar
Head Business Strategy & Regulations (MO)

Encl:

TATA POWER

The Tata Power Company Limited

Dharavi Receiving Station Regulations Department Matunga Mumbai 400019

Tel 91 22 6717 2636 Telefax 91 22 6717 2603

Registered Office Bombay House 24 Homi Mody Street Mumbai 400 001

CIN : L28920MH1919PLC000567 Website : www.tatapower.com Email : tatapower@tatapower.com

**BEFORE THE MAHARASHTRA ELECTRICITY REGULATORY
COMMISSION**

**WORLD TRADE CENTRE, CENTRE NO.1, 13th FLOOR,
CUFFE PARADE, MUMBAI 400005**

CASE NO. 182 OF 2014

IN THE MATTER OF:

The Tata Power Company Limited ... Petitioner
Versus
BEST Undertaking & Ors. ... Respondents

AFFIDAVIT

I, Mr. Bhaskar Sarkar, son of Mr. Arup Kumar Sarkar, aged 49 years, Head Business & Regulations (Mumbai Operation) of The Tata Power Company Limited (“**Petitioner/ Tata Power**”), having my office at Dharavi Receiving Station, Near Shalimar Industrial Estate, Matunga, Mumbai 400 019, Maharashtra, India, do hereby state on solemn affirmation as under:-

1. I state that I am the authorized signatory of Tata Power, the Petitioner, in the present Petition and as such I am fully conversant with the facts and circumstances of the present case and I am duly authorized and competent on behalf of Tata Power to swear and affirm this Affidavit.

2. I state that I have read and understood the accompanying Submissions in the captioned Petition and the same has been drafted under my instructions and after carefully going through the same, I state that the content of the same are true and correct to my knowledge and belief and it is stated that no part of it is false and nothing material has been concealed there from.

Ms. ROSHAN M. MASTER
NOTARY, GREATER BOMBAY
2403, ORCHID TOWER A
BELLASIS ROAD,
MUMBAI- 400 008.



3. I state that the annexures along with the accompanying Submissions, if any, are true copies of their respective originals.




DEPONENT

VERIFICATION

I, the deponent above named, do hereby verify that the contents of my above Affidavit are true and correct, no part of it is false and nothing material has been concealed therefrom.

Verified at Mumbai on this 1st day of September, 2015.




DEPONENT

Represented by
R M Master

Ms. ROSHAN M. MASTER
NOTARY, GREATER BOMBAY
2403, ORCHID TOWER A
BELLASIS ROAD,
MUMBAI- 400 008.

S. no 12401
1-9-2015



Note on Scenarios for Network Laying in Licence Area common to two Distribution Utilities

Case 182 of 2015: In the matter of Petition of The Tata Power Company Ltd. for Approval of Revised Network Rollout Plan in compliance to the directions of the Hon'ble Commission in Case 90 of 2014.

A) Background

- The Network Rollout Plan was submitted to the Hon'ble Commission as a part of Distribution Licence Application of Tata Power.
- The Hon'ble Commission, while granting Distribution Licence to Tata Power in Case 90 of 2014, directed Tata Power to resubmit the Network Rollout Plan based on the directions given by the Hon'ble Commission in its Order. Accordingly, Tata Power submitted a Revised Network Rollout Plan in October, 2014.
- Subsequently in November, 2014, the Hon'ble ATE issued an Order in Appeal 229 and 246 of 2012. In this Judgment, the Hon'ble ATE gave certain directions on network development with respect to areas overlapping with R-Infra.
- Thereafter, Tata Power revised its Network Rollout Plan based on the directions of ATE and submitted the same for approval of the Hon'ble Commission in February, 2015.
- During the hearing dated August 12, 2015 in Case No. 182 of 2014, the Commission directed the Distribution Utilities to submit interpretation of the ATE Judgment on situation specific scenarios for network laying.

B) Legal Framework & Tata Power interpretation of Network Rollout Plan

The Hon'ble ATE in Appeal 246 of 2012 and Appeal no. 229 of 2012 dated November 28, 2014, held that-

"58....

Tata Power should therefore, be restricted to lay down its network only in areas where laying down of parallel network would improve the reliability of supply and benefit the consumer and also for extending supply to new consumers who seek connection from Tata Power."

In view of the above, Tata Power can lay network in 3 situations, namely,

- (i) improve reliability of supply,
- (ii) benefit the consumer and
- (iii) extending power supply to new consumer.

It is obvious from the above directions of the Hon'ble ATE, that there is no restriction to Tata Power in laying network for new consumers in Mumbai Suburban area.

C) Network Roll-out Philosophy

The network rollout plan of Tata Power is based on the philosophy that, being a Distribution Licensee it needs to:

- a) Create a backbone distribution network infrastructure comprising high Voltage (33kV/11kV) Distribution Substation System (DSS);
- b) Identify source or outlet at the Transmission Receiving Station (RSS) for input power supply to DSS;
- c) Establish connectivity to feed the DSS from the identified RSS; and
- d) Create 11 kV network for feeding Consumer Substations (CSS) as and when required.

Thus, the DSS based Distribution Backbone shall include the 33 kV cable from Transmission RSS to DSS, the DSS itself, and the 11 kV network for distribution of power supply.

Accordingly, Tata Power has made investment of around Rs. 1200 Crores in creating the Distribution Backbone network, comprising of 975 MVA DSS capacity and around 850 km 11 kV cable network along with associated infrastructure.

While Tata Power has been permitted to lay its own network for supplying electricity to new consumers, the Hon'ble ATE has also indicated that, Tata Power shall utilize RInfra network to serve the migrating consumers where Tata Power's backbone network does not exist. As stated earlier, Tata Power has an established DSS and 11 kV network and to enable power supply to the consumers on its wires, has to extend small parts of network and install CSS and the subsequent LT network as per requirement.

D) Scenarios for Network laying

In view of the directions given by the Hon'ble ATE, Tata Power has developed scenarios for network laying. Following principles have been considered while developing the network laying scenarios.

- a. Consumer choice and competition are key principles enshrined under the Electricity Act, 2003. Hence, the consumer has been kept at the centre while developing scenarios.
- b. It may be noted that Tata Power believes DSS to be the most critical element of the Distribution Network and therefore, Scenarios have been defined in terms of availability of DSS of the utility in the vicinity of the consumer.
- c. If the DSS of the utility exists in any particular area, the utility should be permitted to lay the relevant network to serve the consumers who approach the Utility.
- d. Both the Distribution Utilities are obliged to provide last mile connectivity, if spare capacity exists in their respective DSS, independent of request arising directly from consumer or the other Distribution Utility.
- e. While it is important to avoid duplication of network, creation of infrastructure always creates extra capacity during initial period.
- f. The new consumer definition is as considered by Tata Power in their submission for defining new consumer.

The following four scenarios for network laying have been envisaged considering two Distribution Licensees having a common Licence Area:

1. Scenario 1:- New Consumer approaching Distribution Utility having adequate DSS infrastructure in the vicinity

In this case, where sufficient infrastructure of the Distribution Utility exists; the Distribution Utility should be allowed to connect the consumers to its network, even if it means creating CSS infrastructure.

2. Scenario 2:- New consumer approaching a Distribution Utility with inadequate DSS infrastructure in the vicinity

In this case, a consumer has approached a Distribution Utility which does not have enough DSS capacity. However, it may be possible that the other Distribution Utility has sufficient DSS capacity in the vicinity and is in the position to provide the connectivity. Under such conditions, the Distribution Utility to whom the consumer has approached would approach the other Distribution Utility who would be obliged to provide the connectivity to the consumer. As per the General Conditions of Distribution Licence Regulations 2006, the Distribution Utility may request the other Distribution Utility to utilize his network to serve the new consumers. Thus, in the interest of the consumers and to optimize the capital investments in network, all utilities must share their network. In this scenario, the tariff to the consumer will be the wheeling charges of the Distribution Utility whose network is used and all the other charges shall be of the Distribution Utility who will supply to the consumer.

3. Scenario 3:- New consumer approaching utility with inadequate infrastructure in the vicinity with possibility of developing DSS infrastructure

In this case, a consumer approaches the Distribution Utility which does not have adequate DSS capacity, however, the consumer is willing to provide sufficient space to create a DSS infrastructure. Here, it is pertinent to note that availability of space for establishing DSS is of prime importance in a city like Mumbai where space is a huge constraint. Hence, an opportunity to establish a DSS should not be lost. Further, in such case, as the consumer has indicated his preference to the particular Distribution Utility, hence, that particular Distribution Utility shall be permitted to create the DSS infrastructure that may serve that particular consumer as well as other adjoining consumers.

4. Scenario 4: Consumer approaches a Distribution Utility whose network is overloaded & needs augmentation to improve Reliability

In this case a consumer approaches a utility with overloaded network which needs augmentation, whereas in vicinity there exists network of other utility which is under-loaded, then, the existing under-loaded Distribution Network should be first loaded before taking up any augmentation of network by the utility which has overloaded network. This will ensure network optimization and

economical utilization which will benefit consumers through lower wheeling charges. For eg. Tata Power has made substantial investments in developing Distribution Network during the MYT Control Period under specific directions of the Hon'ble Commission and such network is presently under-loaded. In such areas, this existing under loaded network should be loaded first before any augmentation of network is taken up by R-Infra.

5. Scenario 5:- Consumer connected to a Distribution Utility seeks migration on network of the other Distribution Utility having adequate DSS infrastructure in the vicinity

In this case, a consumer who is connected to the network of one utility seeks migration to the network of another utility; the consumer should be provided connectivity to the Distribution Utility of its choice. The Distribution Utility should be allowed to connect the consumers to its network, where sufficient infrastructure of the utility exists, even if it means creating CSS infrastructure.

E) Responsibilities of the two Distribution Utilities under different scenarios of network laying:

The above scenarios have been explained in a tabular format below:

Assumptions:

- There exists two Distribution Utilities in a geographical area: Utility-1 and Utility-2
- A new Consumer has approached Utility-1 for availing electricity supply

Responsibility matrix for different scenarios:

Sr. No.	Scenario	Utility-1	Utility-2
1.	DSS of the Utility-1 already exists in the vicinity	Necessary network is laid and consumer is provided with electricity supply as per existing SOP Regulations	-
2.	DSS of the Utility-1 does not exist in vicinity and consumer cannot provide space for constructing new DSS	<p>a. Check if the DSS (with necessary capacity and possible loading) of the Utility-2 exists in the vicinity</p> <p>b. If such DSS exists, inform Utility-2 to lay network for connecting to consumer. The consumer would get supply from Utility-1 on Wires of Utility-2 wires by paying</p>	Utility-2 is obliged to provide last mile connectivity to the consumer

		wheeling charges of Utility-2	
3.	DSS of the Utility-1 does not exist in vicinity, however, consumer is ready to provide space for constructing new DSS	Utility-1 shall construct new DSS and provide last mile connectivity to the consumer	-
4.	DSS of Utility 1 exists but is overloaded and needs augmentation and DSS of Utility 2 exists but is underloaded	Inform Utility-2 to lay network for connecting to consumer. The consumer would get supply from Utility-1 on Wires of Utility-2 wires by paying wheeling charges of Utility-2	Utility-2 is obliged to provide last mile connectivity to the consumer

Existing Consumer wishes to migrate from Utility 1 to Utility 2

Sr. No.	Scenario	Utility-1	Utility-2
1.	Existing Consumer wishes to migrate from Utility 1 to Utility 2	Utility 1 to allow disconnection of the consumer	Utility 2 to carry out migration only if power can be supplied from its existing DSS

F) Suggestions for increasing transparency in network development process

Tata Power believes, it is important to bring in transparency in the process of capital expenditure approval process, especially in view of the multiple licensee framework envisaged in the city of Mumbai. In this regard, Tata Power would like to make following specific suggestions for consideration of the Hon'ble Commission.

- The Commission may develop a transparent process for approval of Capex involving all relevant Stakeholders. For this purpose, the Commission may consider establishment of Appellate Technical Council (ATC), a separate institutional structure for scrutiny and recommendation of new distribution infrastructure in city. The proposed ATC may work on the lines of Grid Coordination Committee established by this Hon'ble Commission for transmission infrastructure in the State.
- DSS is the most important element of distribution infrastructure. It is important that information related to loading of DSS is available in public domain. This would ensure that utilities don't create DSS infrastructure when not required. Therefore, Tata Power requests the Commission to

develop a mechanism (may be web based tool) that would provide information about loading of DSS of all utilities in the city. The proposal of the utility to create infrastructure may be considered only if DSS in the vicinity is getting loaded beyond technical standard.