

The Brihan Mumbai Electric Supply & Transport Undertaking

(OF THE BRIHAN MUMBAI MAHANAGARPALIKA)

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OUR REF. : DCER/ 324 /2015

DATE : 21 SEP 2015

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

Sub.: Petition of Tata Power Company for submission of Revised Network Rollout Plan in compliance to the direction of the Hon'ble Commission in Case No. 90 of 2014 and the direction of the Hon'ble ATE in Appeal Nos. 246 and 229 of 2012
(Case No. 182 of 2014)

Ref.: Daily Order dated 08.09.2015


Sir,

In the matter referred above, please find enclosed herewith BEST's Written Submissions on the Petition filed by TPC in Case No. 182 of 2014, for Hon'ble Commission's kind consideration.

Thanking you,

Encl.: As above

Yours faithfully,


(S.S. Jadhav)
Deputy Chief Engineer
(Regulatory)

"BEST Travel Saves Fuel"

BEFORE THE MAHARASHTRA ELECTRICITY REGULATORY COMMISSION,
MUMBAI

CASE NO. : 182 OF 2014

IN THE MATTER OF:

Petition for submission of Revised Network Rollout Plan in compliance to the direction of the Hon'ble Commission in Case No. 90 of 2014 and the direction of the Hon'ble ATE in Appeal Nos. 246 and 229 of 2012.

AND IN THE MATTER OF:

Tata Power Company Limited,
Bombay House, 24, Homi Mody Street,
Mumbai-400001

----- Petitioner

WRITTEN SUBMISSIONS ON BEHALF OF BEST

1. **Related proceedings pending before Hon'ble APTEL and Hon'ble Supreme Court of India.**

At the outset, BEST clarifies that there are proceedings pending before (i) Hon'ble APTEL under the Appeal No. 243 of 2014, and (ii) Hon'ble Supreme Court of India under the Civil Appeal No. 4074 of 2015 and the Civil Appeal (Diary) No. 11771 of 2015, wherein inter alia TPC and BEST are parties and wherein issues arising and / or relief sought are relevant to the issues arising in the present matter. BEST states that the above (i) Appeal No. 243 of 2014 is pending hearing and final disposal before the Hon'ble APTEL, (ii) Civil Appeal No. 4074 of 2015 and Civil

Appeal (Diary) No. 11771 of 2015 are pending hearing and final disposal before the Hon'ble Supreme Court of India. Without prejudice to the aforesaid Appeal No. 243 of 2014, Civil Appeal No. 4074 of 2015 and Civil Appeal (Diary) No.11771 of 2015, BEST is now dealing with the present matter, as hereunder

2. **Pleadings have already been filed by BEST in the present matter.**

It is clarified that BEST has already filed its Reply dated 29.07.2015, Additional Reply dated 11.08.2015, Further Reply dated 07.09.2015, Reply dated 07.09.2015 to TPC's Submissions on meaning of "New Connection/New Consumer" dated 07.09.2015 and Reply dated 07.09.2015 to TPC's Submissions on Observations, Findings and Directions of Hon'ble APTEL's Judgement dated 28.11.2014, in this Case No. 182 of 2014. BEST reiterates that the contents of the aforesaid Pleadings, and submits that the same be deemed to be and are part of these Written Submissions.

3. **Necessity for TVS and Public Hearing in the present matter.**

It is pertinent that the present Case No. 182 of 2014 is not only a continuation of, but is also a part and parcel of, the earlier Case No. 90 of 2014 filed by TPC for grant of distribution licence. Therefore, the Revised Network Rollout Plan submitted by TPC under the present Case No. 182 of 2014, is necessarily required to be examined under a Technical Validation Session

(i.e. TVS), and thereafter notified to the General Public for objections, if any and then decided after a Public Hearing, by MERC, in compliance with the letter and spirit of Section 15 of the Electricity Act, 2003 and the applicable Rules and Regulations made thereunder. BEST submits that these proceedings are necessary and be also adopted by MERC to decide the present Case No. 182 of 2014.

4. **Basic submission “in nutshell” of BEST in the present matter.**

It is pertinent that the Revised Network Rollout Plan submitted by TPC in this Case No. 182 of 2014, is ex facie :-

(i) not providing for an adequate or timely rollout of distribution network.

The said Network Rollout Plan merely provides for creation and rollout of an independent distribution network in a phased manner over a period of 7 years. It is significant that such phased development of distribution network is contrary to and in violation of the Electricity Act 2003, and the Rules and Regulations made thereunder, and in particular of the indispensable requirement of Universal Service Obligation. It is also significant that such phased development of distribution network is only likely to result in selective development of distribution network for “cherry picking” of lucrative consumers. The said network rollout plan will not be able to fulfill the requirement under Section 43 of Electricity Act 2003 of “duty to supply on request”.

(ii) not conducive to level playing field and genuine competition.

The said Network Rollout Plan does not provide equal access to all categories of consumers, and in particular, for low end consumers having consumption between 0 – 300 units. The said Network Rollout Plan does not make any specific provision about a creation or rollout by TPC of a distribution network in slum areas and / or for low end consumers.

(iii) not in compliance with the Distribution Licence No. 1 of 2014 granted on 14.08.2014 by MERC to TPC, under the Case No. 90 of 2014.

The said Network Rollout Plan is patently in breach or contravention of the following essential and specific part of the Distribution Licence No. 1 of 2014 granted by MERC to TPC:

"Part II: Specific

- 1. The Distribution Licensee shall submit a detailed Network Rollout Plan in accordance with the observations and directions of the Commission in its Order dated 14 August, 2014 in Case No. 90 of 2014 and the relevant provisions of the Electricity Act, 2003, Rules and Regulations.*
- 2. The plan should clearly bring out that it is cost effective; provides equal access to all categories of consumers; creates a level playing field; and is optimal for the purpose of meeting the Universal Service Obligations in a time bound manner.*
- 3. The plan shall be submitted to the Commission for approval within a period of 6 weeks from the date of commencement of this Distribution Licence."*

However, the Revised Network Rollout Plan submitted by TPC ex-facie does not consider the entire or full geographical area / spread of the island city of Mumbai. The said Network Rollout Plan also ex-facie does not indicate or consider about compliance with the Universal Service Obligation by TPC, to sub-serve all the classes / categories of consumers in the island city of Mumbai. The said Network Rollout Plan is limited to specific Wards in the island city of Mumbai. Moreover, the said Network Rollout Plan proceeds on the basis that TPC is free to choose for selectively create or rollout its distribution network in its area of supply.

5. **Misleading reference by TPC, for the network roll out plan of Mumbai city, to the Judgment dated 28.11.2014 passed by Hon'ble APTEL in Appeal Nos. 246 & 229 of 2012.**

It is pertinent that TPC has originally filed the present Case No. 182 of 2014 for submission of Revised Network Rollout Plan pursuant to the Order dated 14.08.2014 made by MERC in Case No. 90 of 2014 and the Judgment dated 28.11.2014 passed by Hon'ble APTEL in Appeal No. 246 & 229 of 2012. Thereafter, it is significant that TPC under Para 32 of its Additional Submissions dated 19.08.2015 and Para 34 of its Additional Submissions dated 02.09.2015 has estimated the network rollout required (i) in the island city of Mumbai on the basis of the Order dated 14.08.2014 by MERC in Case No. 90 of 2014, and (ii) in the Mumbai suburbs on the basis of the Judgment dated 28.11.2014 passed by Hon'ble APTEL in the Appeal Nos. 246 and 229 of 2012, pursuant to the Daily Order dated

12.08.2015 made by MERC in this Case No. 182 of 2014 requiring different treatment by TPC of the area common with BEST vis-à-vis the area common with RInfra. However, at the same time, TPC has illegally and malafide relied upon the said Judgment dated 28.11.2014, in proposing the network rollout by TPC in the island city of Mumbai. In this regard, BEST submits that TPC cannot arbitrarily substitute the requirements of the Order dated 14.08.2014 made by MERC in Case No. 90 of 2014 and the Distribution License No. 1 of 2014 granted on 14.08.2014 by MERC to TPC, with the requirements of the Judgment dated 28.11.2014 passed by Hon'ble APTEL in the Appeal Nos. 246 and 229 of 2012, to sub-serve the ulterior motives of TPC.

BEST submits that the said Judgement dated 28.11.2014 is neither applicable nor relatable to BEST or its area of supply. In the circumstances, the reference to or reliance upon the said Judgment dated 28.11.2014 by TPC in proposing its network rollout in the island city of Mumbai, is clearly malafide and misconceived.

6. **Revised Network Rollout Plan submitted by TPC is vitiated by uncertainty due to its repeated modifications / variations by TPC.**

It is pertinent that the original Network Rollout Plan submitted by TPC under the Case No. 90 of 2014 was found by MERC to be inadequate, and TPC was directed to submit a detailed Network Rollout Plan (as specified in the Distribution Licence No. 1 of 2014 granted on 14.08.2014 by MERC to TPC)

for approval within a period of 6 weeks. Thereafter, under present Case No. 182 of 2014, TPC has submitted a Revised Network Rollout Plan. However, even such Revised Network Rollout Plan has been modified or varied by TPC repeatedly during the pendency of the present Case No. 182 of 2014. It is significant that TPC has filed numerous Submissions / Pleadings / Presentations in the present Case No. 182 of 2014, to effectuate modifications and variations in the said Revised Network Rollout Plan. Even otherwise, despite the requirement of a detailed Network Rollout Plan under the said Distribution Licence No. 1 of 2014, TPC has malafide and illegally adopted a trial and error approach as well as a piece meal approach in making numerous modifications / variations in its Revised Network Rollout Plan submitted in present Case No.182 of 2014. It is respectfully submitted that such numerous modifications / variations, which continue to be belatedly made by TPC even after a year from the said Distribution Licence No. 1 of 2014, clearly demonstrate that the said Revised Network Rollout Plan is tentative, vague and / or uncertain, in content in nature.

It is also significant that although TPC under Para 32 of its Additional Submissions dated 02.09.2015 has submitted that its Revised Network Rollout Plan is based on assumptions as explained in earlier paragraphs, but TPC has thereafter stated that the actual rollout may get modified based on various factors like consumer demand and preference, transmission outlet availability, triggers for opening up of Green Field areas, etc. It is respectfully submitted by BEST that such network rollout by TPC is ex-facie neither adequate nor timely,

but is a colourable device to cherry pick consumers of electricity in the island city of Mumbai. BEST also submits that such network rollout by TPC is fundamentally contrary to the indispensable requirement of Universal Service Obligation, as provided in Section 43 of Electricity Act, 2003, to be fulfilled by TPC.

7. **Misleading information by TPC in the present matter, about existing distribution network of TPC in the island city of Mumbai.**

It is pertinent that TPC was earlier a licensee which supplied electricity in bulk to BEST, Indian Railways, certain Mills and other bulk consumers, in interalia the island city of Mumbai. As such, TPC has till date developed very limited or negligible distribution network to supply electricity in retail, in the island city of Mumbai. TPC, in the circumstances, has only a limited number of CSS existing in the island city of Mumbai, some of which are situated in defunct Mills and others are utilized to supply electricity in bulk to BEST, Indian Railways and other bulk consumers. Hence, it is significant that TPC does not have any backbone distribution network as well as last mile connectivity from such backbone distribution network, for distribution or supply of electricity in retail, throughout the island city of Mumbai. However, TPC has provided misleading information in the present Case No. 182 of 2014, about an existing distribution network of TPC, in the island city of Mumbai, as stated hereunder:

Particulars	Additional Submission dated 06.08.2015 of TPC (Table No.1)	Presentation made by TPC on 12.08.2015 (Page 35)
Exiting 40 MVA DSS	Location- D ward	Location - FS ward
Length of 33 KV & 22 KV cable	33 KV- 253 Km, 22KV- Not provided	33 KV- Not provided, 22 KV- 191 Km (37 Nos.)
No. of exiting CSS	Not provided	55 Nos. of 22/0.4 KV
Existing CSS capacity	75 MVA	63.71 MVA
Existing CSS loading	28%	20%

It is pertinent to record that a distribution network consist of both i.e. DSS level backbone network as well as CSS level LT network and furthermore service lines and service positions which are the points from where actual fulfillment of condition provided in Section 43 of Electricity Act 2003 is possible. It is therefore submitted that for all practical purposes TPC does not have a retail distribution network and neither has sufficiently planned for it in order to meet the obligation under Section 43 of the Act.

8. **Misleading information by TPC in the present matter, about proposed creation or rollout of distribution network by TPC in the island city of Mumbai.**

It is significant that TPC has provided the following misleading information under its Revised Network Rollout Plan for the island city of Mumbai:

- a) **Focused on MD and not on availability to consumers** : TPC has, under Para 10 of its Additional Submissions dated 02.09.2015, estimated the load projection of 1196 MW (realistic) based on

existing demand of 994 MW being catered in island city of Mumbai by BEST and TPC, and a growth or rise in load of 202 MW in the island city of Mumbai as (i) the natural load growth in the saturated areas in specific wards (i.e. yellow field areas), (ii) the additional load growth due to anticipated redevelopment of existing properties (i.e. brown field areas), and (iii) the addition of load on accounts of anticipated new areas for development (i.e. green field areas). TPC in its Revised Network Rollout Plan has merely estimated / projected a limited and meagre 50% (i.e. about 598 MW) of its projected load (MD) in computation of an independent distribution network for the island city of Mumbai. It is significant that the load estimated by TPC for its network rollout does not at all deal with the demand of the existing consumers of BEST, but only selectively seeks to cater to new or fresh load /demand in the island city of Mumbai. It is also significant that the Revised Network Rollout Plan does not specify the category-wise load / demand for consumers and year-wise sales on creation of the backbone distribution network.

TPC has failed to elaborate about the creation of specific access points for the consumers and has attempted to hide behind the term last mile connectivity. It needs to be mentioned that a distribution network is necessarily about creation of last mile connectivity as well that enables a distribution licensee to meet the mandatory requirement of 'Supply on request' as per Section 43 of Electricity Act 2003. BEST

for example has about 66,000 service positions from where it is able to meet the supply on request. It needs to be mentioned that establishment of CSS and service positions cannot be excluded from the network rollout plan as they essentially form the distribution network. **Annexures** show a small part of BEST's elaborate distribution network at HT and LT level both which finally culminate in to a HT or LT service position, thereby making supply available to the consumer.

- b) **Misleading information regards to existing capacity:** TPC has, under Para 14 of its Additional Submissions dated 02.09.2015, proposed Revised Network Rollout Plan with requirement of 747 MVA DSS capacity to cater 50% (i.e. about 598 MW) of the total estimated load projection. TPC has subsequently projected DSS and its capacity by the way of (i) utilizing available capacity of 409 MVA (i.e. 377 MVA of existing 22 kV cable and 32 MVA capacity of existing DSS) and (ii) additional 338 MVA capacity by establishing 9 new DSS of 40 MVA each. However, TPC is misleading about the existing DSS capacity of 409 MVA in the island city of Mumbai. TPC is apparently having at present 1 DSS of 40 MVA capacity and 22 kV underground cable network having stated available capacity of 377 MVA. However, the 22 kV cable network does not have any transforming capacity for further downstream distribution. Moreover, no capex has been provided by TPC in its plan period of 7 years to utilize the available capacity in 22 kV

cable network for installation and commissioning of full-fledged DSSs of matching transforming capacity of 377 MVA. Therefore, the existing DSS capacity of 409 MVA alleged by TPC, is false and misleading. As such, DSS capacity planned in the Revised Network Rollout Plan in reality is of only 360 MVA instead of 747 MVA capacity alleged by TPC, and is clearly inadequate to cater to even the demand of 598 MW for the purposes of meeting the Universal Service Obligation.

- c) **Failed and neglected to establish/ provide for DSS in majority of the Municipal wards in the plan:** TPC has, under Para 29 and 35 of its Additional Submissions dated 02.09.2015, provided for DSS and CSS to be established Ward-wise, but has not clarified about the availability of locations or sites or the precise geographical address for establishing such DSS and CSS. It is significant that such geographical address of the proposed DSS/ CSS, is indispensably necessary to disclose and substantiate compliance with the Universal Service Obligation by TPC. BEST states that as per the network design proposed by the TPC in its Revised Network Rollout Plan, the DSS will feed the downstream CSS network to eventually meet the load demand of the consumer. However, a bare perusal of the GIS Map showing the ward-wise network proposed for the island city of Mumbai clearly discloses that TPC has failed and neglected to establish DSS in the majority of Municipal wards in the island city of Mumbai.

- d) **Existing consumers ignored:** TPC has planned about 50% of total requirement of additional DSS/ CSS (i.e. 5 nos. of DSS and 193 nos. of CSS) in the area of A, C and D Municipal Wards, out of its projection of additional requirement of 9 nos. of DSS of 360 MVA capacity and 365 nos. of CSS of 365 MVA capacity for island city of Mumbai. Nevertheless, it is pertinent that these Wards are densely populated and congested, and there is already an acute shortage of space in these Wards. It is significant that the locations or sites for establishing such DSS are important, as there is a grave lack or shortage of available open plots or available land in the island city of Mumbai. The space for a DSS would be available only if a large plot (i.e. plot having area of more than 20,000 sq.mtrs.) is available or taken up for development. BEST submits that TPC does not intend to establish the DSS to cater existing consumers. Moreover, TPC network plan of only 360 MVA capacity, as against the projected demand of 598 MW, is intended to cater only future growth in demand and is not at all sufficient enough to meet existing demand and to fulfil the Universal Service Obligation and duty to supply on demand in case of existing consumers in the island city of Mumbai.
- e) **Inconsistent spread of network:** TPC currently does not have any HT/ LT distribution network in highly dense A, B, C and D Municipal Wards, in the island city of Mumbai. Even in the remaining 5 Municipal Wards in the island city of Mumbai, TPC has

limited distribution network of 22/0.4 kV and 6.6 kV configuration supplying its HT consumers and concentrated LT loads. In the Revised Network Rollout Plan under Table No. 15, TPC has not projected any HT/ LT network rollout in the area covering B, F North and G North Municipal Wards. Further, even though, TPC has proposed 23 MVA CSS capacity in F South Municipal Ward, but TPC has not proposed any associated creation of DSS capacity and 33 kV/11kV cable network. BEST submits that major slum pockets of Antop Hill and Dharavi are located in F North and G North Municipal Wards. BEST is presently serving about 3.5 lakhs consumers, most of which from weaker section of society, in these two Municipal Wards. BEST submits that more than 5 lakh consumers itself in above said 4 Municipal Wards having slum pockets and low end categories consumers will be deprived of services of TPC, as distribution licensee, for want of adequate and effective network rollout plan by TPC in the said Wards.

9. **Inadequacy of Revised Network Rollout Plan of TPC vis-à-vis the parameters of existing distribution network of BEST.**

BEST submits that as Mumbai is a financial hub of India, and uninterrupted and reliable electric supply on 24 x 7 basis is an essential requirement of the consumers. The unique 11 kV and LT ring network with (n-1) redundancy is effective to ensure that electricity is restored during failure of any component of the network with least delay or

without inconvenience cause to the consumers. The optimal loading of the interconnected HT/ LT network minimises the distribution loss. Further, through spread out LT network, it is possible to provide new electric connection to the consumer on demand within the specified time limit of MERC (SoP) Regulations. Therefore, the HT / LT network with (n-1) redundancy allows distribution licensee to maintain the network reliability, which necessitates planning on higher side for installed capacity at DSS/CSS level and laying of HT/LT cable network to effectively serve the consumers. TPC under its submission dated 02.09.2015 has made the following amongst other proposals, which are required to be compared and examined vis-a-vis the existing network parameters of BEST:

Particulars	BEST-Existing	Proposed Network Rollout by TPC	Comparative Difference in %
Demand serve (MW)	900	598	- 66%
Nos. of DSS (Existing + Proposed)	56	10	- 17%
Capacity of DSS (Existing + Proposed) (MVA)	1902	400	- 21%
No. of CSS (Existing + Proposed)	2261	420	- 18%
Capacity of CSS (Existing + Proposed) (MVA)	2451	440	- 17%
Length of 11kV cable network (kms)	1966	288	- 14%
Length of LT cable network (kms)	8269*	499	- 06%
Service Positions	66000	-	-

* LT Network includes 7500 Auxiliary Distribution Pillars and 74,000 nos. of last mile service cables.

BEST submits that TPC has submitted its Revised Network Rollout Plan with a view to cater the demand of about 598 MW. The demand to be met with proposed rollout plan is almost 66% of 900 MW, which is presently being met by the network of BEST. From the above table, it can be seen that the Revised Network Rollout Plan as proposed by TPC to meet estimated demand of 598 MW, which is about 66% of 900 MW demand presently catered by BEST, is only to the extent of about 17-20% of the network as that of BEST; which is required to be commissioned and maintained for reliable supply which amply establishes inadequacy and inconsistency in the roll out plan of TPC.


It is further submitted that it shall not be a level playing field if TPC is allowed to cater to consumers with only part/partial network rolled out. Whereas BEST will have to bear the cost of maintaining an exhaustive network which it has, TPC on the other hand will have the loading of a relatively smaller maintenance cost on account of its relatively smaller distribution network. It is submitted that TPC should not be allowed to connect to consumers unless they are USO ready or else it will be detrimental and unfair to the business interests of BEST.

10. It is unclear from the entire submission of TPC that when its network will finally be ready to meet the USO in accordance with Section 43 of the Electricity Act 2003. In absence of the same the plan remains uncertain, tentative and conditional. The unpredictability expressed by TPC in Para 52 of its submission dated 6th Aug, 2015 will make the evaluation of network roll out a

difficult task and there will exist ample reasons to hide behind for failure to develop network and meet license obligations.

11. BEST submits that TPC's network rollout plan is fundamentally flawed as it is split in to backbone network and last mile connectivity, whereas the plan explains about the backbone network, it is severely restricted about the last mile connectivity. It is submitted that a power distribution network as understood and dealt by Hon'ble Commission in various orders starts from breaker end of a Transmission Receiving station (part of Transmission network) right up to the service position. A DSS and CSS are both part of the distribution network along with the Distribution Pillars and service positions from where finally the service mains go to the respective meters of the consumers. It is incorrect to ignore the planning of the CSSs and service positions as they essentially form part of the distribution network. Ignoring CSS and service position aspect will actually make the establishment of DSS a futile exercise, because owing to the difficulty of space in Mumbai city the intent to make available alternate supplier to the consumer may be delayed indefinitely in many or most cases. Thereby defeating purpose of the entire exercise of allowing a parallel licensee. It is submitted that TPCs roll out plan is gravely erroneous on this aspect and flawed.
12. BEST submits that the proposal of the TPC of sharing of BEST's network on payment of association charges is under consideration of the Management. BEST will reply to TPC accordingly after its Management's scrutiny in the matter.

13. In the circumstances and for reasons afore stated, BEST humbly submits and prays that the Revised Network Rollout Plan submitted by TPC deserves to and should be discredited, and the present Case No. 182 of 2014 filed by TPC ought to and should be dismissed with costs.


(S.S. Jadhav)
Deputy Chief Engineer
(Regulatory)
For Brihanmumbai Electric Supply
& Transport Undertaking

Place: Mumbai

Date: 21st September, 2015