Additional clarifications on Licence Applications filed by Adani Electricity Navi Mumbai Limited (AENML) and Adani Transmission Limited (ATL) in

Case No 173 of 2022

1. **AENML has projected sales of ~ 30% of the total sales within the proposed licence area and accordingly capex has been projected by AENML in its network rollout plan. AENML to submit the capex required for network roll-out plan to supply to all the consumers (100 % USO and also 100% sales in the proposed licence area) within the proposed supply area along with the break up of major capital items and cost thereof incl. basis for estimation of such capex estimation.**

AENML Response:

AENML would like to clarify that in its Business Plan (Annexure-11 to the License Application), AENML has proposed the network laying over entire area so that it can meet its USO obligation i.e. to provide connection to consumer demanding supply within timelines as specified under Electricity Act, 2003 and MERC (Electricity Supply Code and Standards of Performance of Distribution Licensees including Power Quality) Regulations, 2021. However, for the purpose of Business Plan AENML estimated that it may acquire sales of about 3,151 MUs (which works out to ~30% of sales i.e., 9,500 MUs of existing Distribution Licensee (DL) in the proposed license area) over five years. It is further clarified that in its Business Plan, laying of entire HT backbone network is proposed and the LT network to the extent of projected sales.

While the Hon'ble Commission has sought Capex requirement for supplying 100% energy sales of incumbent Distribution Licensee, it is submitted that based on the AEML experience of working in parallel license area in Mumbai, it can be concluded that 100% consumer migration in five year period is nearly impossible and the actual capex for declaring USO in the entire proposed area would be much less than Rs 8,000 Cr. calculated hereunder. However, without prejudice to its aforesaid, as required by Hon'ble Commission, AENML has worked out the Capex requirement for serving the entire present sales of existing DL.

Assumptions:

1. AENML has proposed the Capex in its Business Plan with following assumption:
    a. Maximum loading of the assets restricted to 60%;
    b. Capacity assumed to be handled per 33 kV feeder @ 10 MVA;
    c. Capacity assumed to be handled per 11 kV feeder @ 3 MVA;
    d. Average length of 33 kV/22 kV feeder @ 10 kM;
    e. Average length of 11 kV feeder @ 4.5 kM;
    f. Average length of 1 kM of LT feeder for each 1 MVA DT capacity.

AENML has considered same assumptions for working out the Capex requirement if it was to serve entire sales of incumbent DL.

2. Hon'ble Commission under query 3 has asked AENML to provide criteria and detailed justification including details of field survey (if any) considered for proposed network roll-out plan along with alternate options for development of network roll-out plan. The detailed response of this query is given under response to query 3, however, here AENML wish to clarify that while working out the revised BoQ and Capex, it has considered the impact of response under query 3.

3. AENML has also not proposed any rollout plan in the Distribution Franchisee (DF) Area falling in Thane District to avoid complication in functioning of DF, existing DL and AENML during the Franchisee Agreement which otherwise may possibly lead to AENML becoming party in their contractual dispute, if any, arising out of the Franchise Agreement.

4. AENML's proposed philosophy of declaring USO as proposed in the petition is as under-.

    a. EHV Consumers: Entire Supply area on grant of license subject to availability of InSTS/ISTS connectivity.

    b. 33-22 kV Consumers: Larger area based on Municipal Ward boundaries subject to availability of outlets or availability of margins on released outlets.

    c. 11 kV and LT consumers: Cluster-wise (with clearly defined boundary of wards & villages etc. as the case may be)

Considering above assumption, the Capex requirement is worked out as under:

As explained earlier the HT network proposed in the Business Plan requires no change and as such the change is required only in DT transformation capacities and LT network laying. Accordingly, the estimated capex works out to be as follows:

Item wise	Rate	Rate UoM	Major BoQ	BoQ UoM	Total Cost (Rs.Cr)
33-22/11 kV DSS (32 MVA)	19.20	Rs. Cr	97	Nos	1,862
DTs (100 KVA)	4.32	Rs. Lac	24,080	Nos	1,040
33 kV UG cables	82.50	Rs. Lac	835	Kms	689
11 kV UG cables	85.10	Rs. Lac	2,666	Kms	2,269
11 kV OH lines	25.00	Rs. Lac	280	Kms	70
33 kV OH lines	40.00	Rs. Lac	93	Kms	37
LT UG cables	39.00	Rs. Lac	2,408	Kms	939
LT Pillars (4W & Mini Pillars)	0.45	Rs. Lac	24,080	Nos	108
RMUs	8.26	Rs. Lac	7,259	Nos	600
CTPT	1.35	Rs. Lac	1,238	Nos	17
Other items like meters, IT infrastructure, etc. as per need					370
Total Rs Cr					**8,000**

^ Per unit cost of all underground items are based on prices used by AEML for its DPR. OH lines cost as per the cost data of various distribution licensees.

The above Capex projection are worked out based on the current rates. It is further submitted that in line with MERC (Approval of Capital Investment Schemes) Regulations, 2022, AENML shall submit the DPRs of works proposed in the network roll out plan from time to time considering the prevailing rates for 'In-principle' approval of Hon'ble Commission.

2. **AENML to clarify and submit the necessary documents to show how it will meet the requirement of Capital Adequacy and Creditworthiness as specified in the Distribution of Electricity Licence (Additional Requirements of Capital Adequacy, Creditworthiness and Code of Conduct) Rules, 2005 considering the capex estimated to supply to all the consumers within the proposed area of supply along with updated solvency certificate, updated Credit Rating Report in support thereof.**

AENML Response:

It is submitted that AENML has filed the application for License in Navi Mumbai area in conjunction with its parent company ATL. The requirements of Capital Adequacy and Creditworthiness as per the Rules 2005 of the Central Government are demonstrated using the credentials of ATL. It is further submitted that the size of the proposed area is decided only after factoring in the capital adequacy and creditworthiness requirement as per the Rules 2005 of the Central government, existing regulatory framework based on Hon'ble ATE judgement and past orders of Hon'ble Commission.

Capital Adequacy requirement:

While the Hon'ble Commission has sought Capex requirement for supplying 100% energy sales of existing Distribution License, it is submitted that based on the AEML experience of working in parallel license area in Mumbai, it can be concluded that 100% consumer migration in five-year period is nearly impossible and the actual capex for declaring USO in the entire proposed area would be much less than the projected Capex of Rs 8,000 Cr. However, without prejudice to its aforesaid contention, as required by Hon'ble Commission AENML has worked out the capital investment requirement of Rs. 8,000 Crore considering USO readiness for the entire sale of existing DL. Considering a norm of 30% equity, the total equity investment required is Rs. 2,400 Crore. It is reasonable to expect that the company shall invest at least 26% of the total equity requirement from its own resources to have sufficient control in terms of controlling stake and voting rights in the said licensed business. Therefore, for the purpose of satisfying the capital adequacy requirement, ATL/AENML needs to invest a minimum equity capital of Rs. 624 Crore. It is submitted that the balance equity will be obtained through any other mode and may include diluting ATL's ownership in the distribution business/es to raise equity from outside sources. The Hon'ble Commission had adopted this principle for determining the minimum equity investment required by the Applicant in the Order dated 11.08.2011 in Case No. 65 of 2011 (Application of Reliance Infrastructure Limited (now AEML) for grant of Distribution Licence in and around suburbs of Mumbai inclusive of area covered under Chene and Varsova which are contiguous with Applicant/s existing area of licence). ATL/AENML has followed the same principle for determination of minimum equity commitment by ATL/AENML for the license application of Navi Mumbai area.

According to the Rules, 2005 of the Central Government, the Capital Adequacy has to be assessed based on Net worth and Internal Resource Generation of preceding three years. As the EA03 or the Rules of the Central Government do not specify any method of computing Net worth and Internal

Resource Generation, AENML has adopted the method adopted by the Hon'ble Commission in the Order dated 11.08.2011 in Case No. 65 of 2011.

Also, Hon'ble ATE in Appeal No. 7 of 2010, which is reproduced below:

> *"In order to meet the obligation to supply as per Section 43 of the Electricity Act, 2003, the Applicant is required to satisfy the Capital Adequacy and creditworthiness norms and the same should be based on the total capital investments for the distribution network. It should be on the norms of 30% equity on the total investments to be determined by the State Commission."* (Emphasis Added)

The certificate of Net worth submitted as Exhibit-III to the petition is enclosed herewith as **Annexure-01**.

The certificate of Internal Resource Generation (IRG) which is submitted as Exhibit-IV to the petition is enclosed herewith as **Annexure-02.**

For assessing the capital adequacy of ATL/AENML, the following two conditions needs to be satisfied.

Test 1: Is the maximum of (NW1, NW2, NW3) – CE ≥ CIC

AND

Test 2: Is five (5) times the maximum of (IRG1, IRG2, IRG3) – CE ≥ CIC

Where:

IRG1: Internal Resource Generation for the last audited financial year

IRG2: Internal Resource Generation for the year before the last audited financial year

IRG3: Internal Resource Generation for two years before the last audited financial year

CE: 26% of the Committed Equity investments elsewhere

CIC: 26% of (30% of Capital Investment Criteria) as estimated from capital expenditure requirement.

NW1: Net worth for the last audited financial year

NW2: Net worth for the year before the last audited financial year

NW3: Net worth for two years before the last audited financial year

The multiplying factor for Internal Resource Generation (IRG) is taken as "five (5)", which reflects the minimum number of years required to setup the distribution system in the applied licence area.

The above two conditions were used by the Hon'ble Commission while approving the Distribution License of Reliance Infrastructure Limited in the Order dated 11.08.2011 in Case No. 65 of 2011. Accordingly, ATL/AENML has used the two conditions to demonstrate the capital adequacy of

ATL/AENML for License application for Navi Mumbai area. The Net worth and Internal Resource Generation (IRG) for ATL for the last three financial years are as under:

Year (Rs. Crore)	Reference	FY 2019-20	FY 2020-21	FY 2021-22
Net worth	Annexure-01	9,561.09	10,022.86	11,006.50
IRG	Annexure-02	2,682.80	1,769.30	1,588.50

As regards the committed equity investment elsewhere (other than the proposed License area), it submitted that ATL has a committed investment of Rs. 3,500 Crore in other geographies in the country (*Ref. AENML response dated 17.01.2023 to query 1 of clarifications dated 12.01.2023*). Considering a norm of 30% equity, the committed equity investment elsewhere is Rs. 1,050 Crore. As stated above, the entity needs minimum 26% share in equity in order to retain management control over the company and hence for the purpose of determining committed equity investment elsewhere in the above two conditions, AENML has considered 26% of Rs. 1,050 Crore (i.e., Rs. 273 Crore). This method of determining committed equity investment elsewhere has been used by the Hon'ble Commission in the Order dated 11.08.2011 in Case No. 65 of 2011. Hence the same method has been used by AENML to determine committed equity investment elsewhere for the present License application.

Therefore, according to the first test, the Net worth, adjusted for the committed equity investments elsewhere, is computed to be Rs.10,733.50 Crore, as shown in table below:

Particulars (Rs. Cr)	Maximum of (NW1, NW2, NW3)	CE	Maximum of (NW1, NW2, NW3) – CE
Test 1	11,006.50	273	10,733.50

Whereas as explained above, ATL/AENML are required to have minimum equity investment of Rs. 624 Crore only. Since, the adjusted Net worth (Rs. 10,733.50 Crore) is greater than the minimum equity requirement (Rs. 624 crore), ATL/AENML satisfy the Net worth criteria.

Without prejudice to the above even if 100% equity is to be assumed from ATL, the adjusted Net worth is far more than Rs. 2,400 Cr. equity component in the total Capex projections of Rs. 8,000 Cr.

Also, the Internal Resource Generation (IRG), adjusted for the equity investments committed elsewhere, was computed to be Rs. 13,141 Crore, as shown in table below:

Particulars (Rs. Cr)	5 times the maximum of (IRG1, IRG2, IRG3)	CE	5 times the maximum of (IRG1, IRG2, IRG3) - CE

Test 2	13,414.00	273	13,141.00

Whereas as explained above, ATL/AENML are required to have minimum equity investment of Rs. 624 Crore. Since the adjusted IRG (Rs. 13,141 Crore) is greater than the equity requirement (Rs. 624 crore). ATL/AENML satisfy the IRG criteria.

Without prejudice to the above even if 100% equity is to be assumed from ATL, the IRG adjusted for other committed investment is far more than Rs 2,400 Cr. equity component in the total Capex projections of Rs. 8,000 Cr.

Creditworthiness requirement:

The Rules, 2005 of the Central Government do not elaborate on the method of Creditworthiness assessment. The Hon'ble Commission in the Order dated 11.08.2011 in Case No. 65 of 2011 had relied on a Judgment by the Hon'ble ATE in Appeal No. 7 of 2010, which is reproduced below:

> *"The Capital Adequacy is determined on the above basis; and on the basis of the Capital Adequacy so determined the ability of the Applicant to raise finances and funds has to be determined. The creditworthiness of the Applicant will have to be tested by considering whether external borrowings from Banks or Financial institutions will be available to the Applicant based on the fulfilment of the Capital Adequacy norms"* (Emphasis Added)

To implement the above, Hon'ble Commission has adopted the method of assessing the Creditworthiness criteria based on the solvency certificate issued by the Bank. It is submitted that the Bank issues the solvency certificate based on the net worth. It is expected that the applicant shall complete Financial Closure after grant of license and once the applicant starts rolling out the network, the lenders have lien on the assets created and therefore net worth to the extent of assets created loses its significance for creditworthiness criteria.

However, without prejudice to above, AENML has followed the same criteria, as followed by the Hon'ble Commission in the Order dated 11.08.2011 for assessing the Creditworthiness criteria. The MERC (General Conditions of Distribution Licence) Regulations, 2006 (in Point 5 of Part B of Annexure 1 of the Application format) requires the applicant to submit "Bank references asserting that the Applicant is financially solvent". The said certificate from Axis Bank, certifying that ATL is financially solvent to the extent of 70% of Rs 8,000 Cr. i.e. Rs. 5,600 Crore is attached herewith as **Annexure-03**. Since, ATL is financial solvent as per the solvency certificate by Axis Bank atleast to the extent of Rs. 5,600 Crore, it can be concluded that AENML/ ATE satisfy the Creditworthiness criteria. Further, the Hon'ble Commission, in the Order dated 11.08.2011 had also accessed the Creditworthiness criteria of the Applicant using Credit rating report explained above. The Credit report of ATL as per India Ratings and Research is attached herewith as **Annexure-04.** According to the report, the long term debt instruments of ATL are rated IND A1+ for Commercial paper Instrument and IND AA+/Stable for Working Capital Instrument, which indicates that the company has strong financial flexibility and has

comfortable liquidity. Therefore, based on the credit rating report also, it can be concluded that AENML/ ATE satisfy the Creditworthiness criteria.

It is further submitted that AENML is submitting Solvency Certificate of Rs. 5,600 Cr. based on the Capex requirement worked out as per Hon'ble Commission's direction to cover entire sales of existing DL by applying existing Regulatory Framework on capital adequacy and creditworthiness based on Hon'ble ATE Judgement and past orders of Hon'ble Commission.

it is respectfully submitted that the Solvency Certificate issued by the Bank is within the Net worth of the Company ATL/AENML. The said Net worth is also considered towards the equity component of Capex. Based on the past orders of the Hon'ble Commission, it is inferred that the total Capex required for meeting the USO requirement is to be within the Net worth of the company/ parent company at the time of grant of license. However, after grant of license, the Net worth of company to the extent of debt financing shall not be utilised for the Capex requirement.

Based on the above or any other principle in case the requirement of Capital Adequacy or creditworthiness is diluted in future by adopting any other methodology, AENML may please be allowed the liberty to include additional area in the distribution license under section 18 subsequently.

3. AENML in its Business Plan has submitted area wise network roll-out plan for each year. AENML should provide criteria and detailed justification including details of field survey (if any) considered for proposed network roll-out plan. AENML may evaluate alternate options for development of network roll-out plan and submit such options alongwith the merits/demerits thereof.

AENML Response:

A. Criteria and justification considered for area wise network roll-out plan.

To propose the network rollout plan, AENML has considered the experience of its sister concern Adani Electricity Mumbai Limited (AEML), Distribution Licensee in Suburban Mumbai and nearby area where the parallel licensing scenario exits. In addition to this experience AENML has considered other specific points to related to proposed area of license.

Consumer willingness / price sensitivity towards tariff:

In AEML area, consumers have been migrating from one licensee to another since 1998. The migration of consumers was regulated by various Regulatory orders issued from time to time. After the implementation of changeover protocol in case no.50 of 2009, many consumers falling under common area of supply of AEML and Tata Power Company (TPC) started exercising their right on the choice of supplier. Following table indicates the % of sale which opted for alternate option. While the Changeover option is not envisaged in the proposed license area and only Switchover option shall be exercisable by the consumer in its Business Plan AENML has shown the network plan for 5 years and assumed 30% of sale migration through switchover during that period, the table below shows the AEML Changeover and Switchover data of first five years from the year in which choice was made available to consumers. As can be seen in view of the Changeover option available and in absence of Switchover protocol, the percentage of migration of consumers in Switchover was less,

Table 1: Market share of shifting between Parallel Licensees

Particulars	**FY 09-10**	**FY 10-11**	**FY 11-12**	**FY 12-13**	**FY 13-14**
AEML Own Sales **(A)**	8320	7460	6396	6221	6478
Changeover to other Utility Sales **(B)**	208	1559	2655	3114	2843
AEML Network Sale **(A+B)**	8528	9019	9050	9335	9321
% Adoption of other Utility option	**2%**	**17%**	**29%**	**33%**	**31%**

Table-2: Break up of Residential Vs Other consumption who opted for Other Licensee

Particulars	FY 09-10	FY 10-11	FY 11-12	FY 12-13	FY 13-14
Residential Sale	15	224	690	970	1157
Other than Residential	192	1336	1965	2144	1686
Total	208	1559	2655	3114	2843
% Adoption of other Utility option – Non-Residential	**93%**	**86%**	**74%**	**69%**	**59%**

The above table indicates the consumers who have opted the supply from other Utility without changing the network as there was reduction in their electricity cost.

Till FY22, in AEML area only 281 MU shifted from AEML network to TPC network. This is only 2.5% considering total network sale of around 11,000 MU/annum. In Mumbai Consumers have Changeover option hence same was preferred by Consumers over Network switchover. However as envisaged under AENML License area changeover option shall not be available hence only option for exercising choice of Utility is Switchover. Considering this the migration of consumers of nearly same quantum shall happen however through Switchover.

From the above willingness of consumers to shift to lower tariff can be seen clearly. Based on the above operational experience and analysis following are the observations:

a. Even if all the consumers are to be served on own network of Distribution Licensee, if consumers have a choice and opportunity for reducing their electricity bill amount, then consumers would go for it based on awareness.

b. At the same time based on past experience it is observed that even if tariff benefit is offered 100% consumers do not exercise the choice. Hence CAPEX projections and sales estimates should be adjusted accordingly.

c. The adoption in residential consumers is likely to be lower in the initial years as saving will be lower in terms of amount. Awareness of consumers is also likely to be lower in the initial years.

d. In case on non-residential category consumers awareness is generally higher and there is sensitivity to prices as it directly impacts the bottom line. Also, in case of commercial, industrial consumers dedicated resources are assigned by them to optimize on utility cost etc. Therefore, non-residential consumers adoption of other licensee may be higher in the initial years.

Shifting of the consumers with options available for Network Switchover:

Hon'ble Commission's order in Case 182 of 2014 and Case 40 of 2015, made available choice to consumer to migrate from AEML network to TPC network and vice versa. The actual switchover of network between the Licensees depends on various factors such as network availability of other

licensee, tariff differential, service parameters including reliability, space requirement, cost involved, etc.

Post issuance of above orders, the pattern in common area of supply of AEML and TPC till FY22 is as below:

Tariff Category	No. of Consumers	Annual Sale (MU)
LT I(B) - Resi <300	15057	28.64
LT I(B) - Resi>300	2443	14.03
LT II(A)	978	6.95
LT II(B)	88	6.12
LT II(C)	69	8.96
LT III(A)	127	1.92
LT III(B)	160	29.72
LT IV(A)	6	0.07
LT IV(B)	7	0.42
HT I	13	34.03
HT II	15	96.33
HT III	6	29.06
HT IV Metro/ Rail	1	23.40
HT V(B)	3	1.72
Grand Total	**18973**	**281.35**

The above was further segregated into HT & LT and same is as below:

Voltage wise Breakup of Network adoption			
Voltage level	**No of Consumers**	**Annual Sale(MU)**	**% Share**
LT	18935	96.82	34%
HT	38	184.54	66%
Total	**18973**	**281.36**	

Following are the observations based on the numbers and operational experience:

a. For HT network the adoption of alternate options is on higher side as these high- tension consumers are required only to change the HT supply point and rest of the infra remain as it is. Also, space requirement is lower, and these establishments generally have the space to offer to Utility.

b. In case of LT network, the Utility needs the space to setup CSS, etc in the locality of consumer premises / societies. The space availability may be a concern for societies/small establishments hence tradeoffs may not look lucrative.

Stakeholder consultation:

Further, AENML has also informally interacted with various stakeholders such as Real Estate Developers, Industry Associations, Residential Societies, etc. in proposed license area for understanding the requirements and their acceptance for new service providers. However, it is submitted that such informal discussion cannot be converted into numbers.

Considering the above background and considering that AENML will be offering better and faster services at a very competitive rates, following philosophy is the basis for the sales projection over a period of 5 years.

1. The adoption of the AENML network in terms of consumer count in LT will be higher however its contribution in terms of the sale will be lower. Based on the Mumbai experience it is proposed that in case of LT, the adoption will be ~30% of the total sale of existing DL.
2. Adoption of AENML HT network is estimated to be ~50% considering above trend and assuming that consumers facing space constraints may not opt for AENML even if it is cheaper option.
3. In case of EHV Consumers, AENML is estimating adoption to be ~50% of the sale to AENML services.

B. Alternate options for development of network roll-out plan

As required, AENML is submitting the alternate roll-out plan considering the ward numbers of respective Municipal Corporations and Gram Panchayats. AENML has also omitted Distribution Franchisee (DF) Area falling in Thane District from its proposed license area file forming the clusters for network roll-out plan.

The summary of the clusters pockets thus formed for consideration of network roll-out in proposed revised supply area is as under:

- Number of Villages considered as individual cluster: 108
- Number of MCGM wards considered as individual cluster: 19
- Number of NMMC wards considered as individual cluster: 111
- Number of PMC wards considered as individual cluster: 30
- Number of TMC wards (Excluding the DF area) considered as individual cluster: 21

Following year-wise phasing has been proposed for network rollout:

- Phase 1: Year 1 and Year 2, where Year 1 is financial year (FY) subsequent to financial year in which license is granted by Hon'ble Commission and availability of Transmission outlets. The subsequent years to be considered as FY accordingly,
- Phase 2 – Year 3 and Year 4,
- Phase 3 – Year 5 to Year 9.

Since the Roll-out plan and USO readiness is majorly influenced by Transmission outlet availability, following criteria is considered for selecting clusters in each Phase are as follows.

Phase 1:

Availability of spare bays at various existing and upcoming EHV substations of MSETCL as per information extracted from latest MTR filling of MSETCL in Case 232 of 2022. Those clusters falling within the vicinity of the EHV substations with spare bays are taken for rolling out the network in this phase.

Phase 2:

EHV substations where additional capacity augmentation has been proposed by MSETCL in their latest MTR filling of MSETCL in Case 232 of 2022. It is assumed that after capacity additions, new outlets will be available. Therefore, those clusters falling within the vicinity of such EHV substations considered under this Phase for rolling out the network. In case such outlets are available before commencement of year 3, the same shall be included in phase 1.

Phase 3:

As the load develops in proposed area of supply, MSETCL/Transmission Licensee shall plan for new capacity addition and make available new outlets. The gestation period for establishment of such new capacities is typically 3 to 4 years. AENML shall furnish the future outlet requirement based on increasing demand well in advance to STU, which shall in turn initiate appropriate steps in consultation with Transmission Licensees. All such clusters, which will be served after capacity augmentation by Transmission Licensee are considered under this Phase.

It is submitted that the clusters which have been planned in Phase 3 has similar commercial and Industrial and residential consumption mix. Therefore, the sequencing of clusters considered in Phase 3 may undergo change depending on the outlet availability and other enablers. In case the Hon'ble Commission decides to direct the completion of network rollout for USO readiness in five years, the same should be subject to availability of outlets from Transmission Substations in the area.

The summary count of the different clusters in different phases as follows:

Administrative Authority	Phase 1		Phase 2		Phase 3					Total
	Yr1	Yr2	Yr3	Yr4	Yr5	Yr6	Yr7	Yr8	Yr9	
Villages	9	8	13	16	11	10	12	21	8	108
MCGM Wards	1	2	1	5	2	4	3	1		19
NMMC Wards	5	3	13	16	27	30	17			111
PMC Wards	4	2	4	8	5	5	2			30
TMC Wards	2	2	3	5	4	2	3			21
Grand Total	**21**	**17**	**34**	**50**	**49**	**51**	**37**	**22**	**8**	**289**

The following are the general assumptions made for rolling out the network in different clusters.

- STU will allocate the 33-22kV outlets as per the Phasing plan provided by AENML.
- Rollout plan execution will be initiated after allotment of outlets by STU.
- If the 33-22/11kV transformation is done at DSS located in vicinity of STU EHV RSS, then USO can be declared for the area to be supplied by such DSS.
- 11kV U/G or O/H network will be laid to cover the wards or village in vicinity of DSS after approval of respective authorities.
- DF area (Kalwa area of TMC) of Torrent Power is excluded in the proposed Phasing plan.
- For Municipal Corporations under AENML, present ward boundaries as per election commission are considered for Roll out plan.
- For area other than Municipal Corporation, village boundaries are considered in Roll out plan.
- Necessary permission / approvals are timely granted by respective Authorities.

The detailed year-wise network layout along with name of cluster is given in **Annexure-05**. The clusters boundaries marked on proposed license area map and is attached as **Annexure-06**.

C. Advantages of alternative option

As required, AENML envisage following advantages of alternate option proposed herein as under:

i. Planning based on availability of outlet will ensure that USO readiness declaration and network rollout is in sync.
ii. Utilization of capacities of EHV substation and outlets to avoid as far as possible disallowance on account of spare bays. The ARR of Transmission Licensee assured.

iii. Clusters based on administrative boundary ensures monitoring and compliance.

iv. Consumers of respective clusters know in advance about the year in which they can exercise the choice of service provider (DL).

v. DPR approval for 33 kV/22 kV network and DSS commissioning linked with the availability of Transmission outlets from InSTS / ISTS.

vi. DPR approvals for 11 kV and downstream network based on cluster wise Roll-out plan – better for monitoring.

Petitioner No. 1

Petitioner No. 2

Date: 18.04.2023

Place: Mumbai

CERTIFICATE

TO WHOMSOEVER IT MAY CONCERN

We hereby certify that the Net Worth of Adani Transmission Limited at the close of the below mentioned financial years / period is as under: -

(Rs. in Cr.)

Name of the Company	As at 31 March, 2022	As at 31 March, 2021	As at 31 March, 2020
Adani Transmission Limited	11,006.50	10,022.86	9,561.09

The Net worth has been calculated in accordance with Indian Accounting Standards (IndAS) and detailed as per attached **Appendix**.

This certificate is issued on the basis of books of accounts and other information and explanation provided to us and document submitted to us, which we have relied upon.

This certificate is issued on the request of client and we owe no liability either financial or otherwise to anyone in respect of this certificate expect our client.

For, M/s VIRAL DARJI AND ASSOCIATES
Chartered Accountants
(Registration Number: 151022W)

M/s. VIRAL DARJI AND ASSOCIATES * CHARTERED ACCOUNTANTS * AHMEDABAD M. No. 138011 F.R.No. 151022W

VIRAL DARJI
Proprietor
Membership Number: 138011
UDIN No : 22138011ANUGYR8075

Date : 28.07.2022
Place: AHMEDABAD

APPENDIX

Statement of Computation of Net Worth of Adani Transmission Limited

(Rs. in Cr.)

Particulars	As at 31 March, 2022	As at 31 March, 2021	As at 31 March, 2020
Assets - Current & Non Current	47,464.11	43,233.58	39,711.19
Less :Current liabilities	5,656.68	6,417.07	5,381.94
Less: Non Current Liabilities	30,800.93	26,793.65	24,768.16
Total Liabilities	36,457.61	33,210.72	30,150.10
Total Networth	11,006.50	10,022.86	9,561.09

M/s. VIRAL DARJI AND ASSOCIATES
CHARTERED ACCOUNTANTS
AHMEDABAD
M. No. 138011
F.R.No. 131022W

M/s VIRAL DARJI AND ASSOCIATES
Chartered Accountant

Certificate

TO WHOMSOEVER IT MAY CONCERN

We hereby certify that the Internal Resource Generation of Adani Transmission Limited for the below mentioned financial years is as under,

(Rs in Crores)

Name of the Company	FY 22	FY 21	FY 20
Adani Transmission Limited	1,588.5	1,769.3	2,682.8

The Internal Resource Generation has been calculated based on financials prepared in accordance with the Indian Accounting Standards (Ind AS) and is detailed as under:

Statement of Computation of Internal Resource Generation of Adani Transmission Limited.

Particulars	FY 22	FY 21	FY 20
Profit after Tax	1,235.8	1,289.6	706.5
Add:			
Depreciation & Amortisation	1,427.2	1,328.9	1,174.0
Decrease in working capital (excluding Cash and Bank Balances)			1,272.9
Any other Non-Cash Expenditure (including deferred tax)	18.3	27.1	27.7
Less:			
Scheduled loan payments	470.4	342.4	498.0
Increase in working capital (excluding Cash and Bank Balances)	564.2	531.8	
Any other Non-Cash Income (Including deferred tax)	58.2	2.1	0.3
Internal Resource Generation	1,588.5	1,769.3	2,682.8

This certificate is issued on the basis of books of accounts and other information and explanation provided to us and document submitted to us, which we have relied upon

M/s. VIRAL DARJI AND ASSOCIATES
AHMEDABAD
M. No. 138011
CHARTERED ACCOUNTANTS

14 FF/C, Haridham Enclave, B/H Raison Petrol Pump, Raison, Gandhinagar
E mail: viraldarji14@gmail.com, M. No: +91 9824897127

This certificate is issued on the request of client and we owe no liability either financial or otherwise to anyone in respect of this certificate expect our client

For, M/s VIRAL DARJI AND ASSOCIATES
Chartered Accountants
(Registration Number: 151022W)

D.V. Darji

M/s. VIRAL DARJI AND ASSOCIATES * CHARTERED ACCOUNTANTS * AHMEDABAD M. No. 138011 F.R.No. 151022W

VIRAL DARJI
Proprietor
Membership Number: 138011
UDIN No : 22138011ANUHBK3314

Date : 28.07.2022
Place: AHMEDABAD

AXIS BANK

Sr. No : SC 166725

Ref: AXISB/CBBAHD/2022-23/820

Date: 01.03.2023

SOLVENCY CERTIFICATE

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

This Certificate is in continuation to the Certificate issued earlier (Ref: AXISB/CBBAHD/2022-23/934, dated 30.07.2022). The above referred Certificate was issued based on the estimated capital investment envisaged by the customer of around Rs. 5,000.00 Crores (Rupees Five Thousand Crores). The customer has now enhanced the capital investment plan to Rs. 8,000.00 Crores (Rupees Eight Thousand Crores). Accordingly, the customer has requested for a revised solvency Certificate and accordingly this certificate is being issued by the bank.

This is to certify that to the best of our knowledge and information, **M/s Adani Transmission Limited,** incorporated under the Companies Act, 1956 with Corporate Identification No.L40300GJ2013PLC077803 and having its registered office at Adani Corporate House, Shantigram, Near Vaishno Devi Circle, S. G. Highway, Khodiyar, Ahmedabad, Gujarat, 382421, a customer of our bank, is a reputed Company with good financial standing and can be treated as solvent to the extent of Rs. 5600.00 Crores (Rupees Five Thousand Six Hundred Crore Only) also.

It is clarified that this information is furnished without any risk or responsibility on our part in any respect whatsoever more particularly either as guarantor or otherwise.

For AXIS BANK LTD

Authorized Signatory

SS No 5500

AXIS BANK LTD. CBB, Ahmedabad

For AXIS BANK LTD

SS 6989

Authorized Signatory

India Ratings & Research
A Fitch Group Company

India Ratings Affirms Adani Transmission at 'IND AA+'/Stable and CP at 'IND A1+'; Rates Bank Facility

01

FEB 2022

By Divya Charen C

India Ratings and Research (Ind-Ra) has affirmed Adani Transmission Limited's (ATL) Long-Term Issuer Rating at 'IND AA+'. The Outlook is Stable. The instrument-wise rating actions are as follows:

Instrument Type	Date of Issuance	Coupon Rate (%)	Maturity Date	Size of Issue (million)	Rating	Rating Action
Commercial paper (CP)	-	-	Up to 12 months	INR10,000	IND A1+	Affirmed
Working capital facility	-	-	-	INR6,000	IND AA+/Stable	Assigned

Analytical Approach: To arrive at the ratings, Ind-Ra continues to consolidated ATL's transmission business and has considered equity support or cash flow commitment for its subsidiary, Adani Electricity Mumbai Limited (AEML; 'IND AA+'/Stable; holds 74.9%). According to ATL, no equity support is required for AEML, and the same has been assumed in Ind-Ra's analysis.

KEY RATING DRIVERS

Stable Revenue Potential: ATL's transmission business continues to have a strong revenue profile with the revenue being governed by a predictable regulatory regime or contracts signed under tariff-based competitive bidding. Its revenue is availability based and does not depend on the quantum of energy flowing through the transmission network. The transmission business provides a little over 90% EBITDA margin. About 45% of the current transmission assets have regulated tariff; this will increase to 58% post 2025 on commissioning the proposed high voltage double circuit (HVDC) project to improve supply to Mumbai region (license approval pending from Maharashtra Electricity Regulatory Commission). Central and Maharashtra Electricity Regulatory Commissions have demonstrated consistency in their regulations and timeliness in finalising tariff orders. Maharashtra Eastern Grid Power Transmission Company Limited (MEGPTCL, 'IND AA+'/Stable) has received a favourable order from Appellate Tribunal for Electricity in FY22 which will lead to a tariff realisation of INR11.86 billion in FY24 and beyond.

Comfortable Credit Metrics: In 1HFY22, the consolidated net leverage (net debt/EBITDA) reduced to 4.85x (FY21: 5.5x; FY20: 4.27x) and the net interest coverage (net interest expenses/EBITDA) increased to 3.1x (2.9x; 2.4x), led by an increase in the revenue recognised to INR18.3 billion (INR31.2 billion; INR27.9 billion). The leverage is likely to increase, although remain comfortable, during the construction period of the balance 10 assets that are under development.

Liquidity Indicator – Adequate: For the transmission business, the total cash level was INR14.3 billion (including debt service reserve) at 1HFYE22 (1HFYE21: INR12.8 billion). ATL expects an overall equity contribution of about INR30 billion for capex during 4QFY22-FY25 compared to the annual free cash available for capex of more than INR14 billion-15 billion over the same period. This excludes any dividend from AEML. While the collections for interstate transmission assets had been impacted by COVID-19-related

disruptions, the collection ramped up quickly post the relaxation of lockdown norms. Payments for intrastate assets in Maharashtra and Rajasthan have been regular in FY22. The liquidity scheme for distribution companies also supported the collections during FY21-FY22. At 1HFYE22, the receivable days stood at 57 (FYE21: 51). There are no refinancing requirements until FY27. The annual debt service coverage ratio for the transmission business is likely to be at least 1.40x during FY22-FY25.

Given the regular payments from counterparties, ATL is not planning to use the CPs in the near term and even when CPs are accessed, they will be backed by working capital limits. ATL continues to generate cash at the obligor group and receive surplus distribution from subsidiaries. ATL has working capital facilities (INR11.0 billion in ATL, INR1.0 billion in Adani Transmission (India) Limited (ATIL, 'IND AA+'/Stable) and INR1.0 billion in MEGPTCL. As on 31 December 2021, ATL reported fund-based and non-fund-based utilisation of INR2.69 billion and INR3.11 billion, respectively. As on 31 December 2021, ATIL and MEGPTCL reported fund-based utilisation of INR0.99 billion and INR0.70 billion, respectively.

Expansion-related Risk: ATL continues to win new transmission projects through competitive bidding, acquire operating transmission projects and explore opportunities in the distribution business. ATL plans to incur a capex of INR35 billion-50 billion per annum over the near term. The equity requirement for under-construction transmission projects will be INR14 billion-15 billion on an ongoing basis and is likely to be mostly generated from internal accruals and dividend from AEML. ATL has confirmed that the expansion will be funded through internal accruals and additional equity issuances, if required. ATL may depend on temporary arrangements in the interim, such as using the unsecured perpetual securities (UPS) raised for buying AEML. The UPS outstanding at the ATL level was about INR29.7 billion at 1HFYE22 (FYE21: INR28.3 billion; FYE20: INR32.8 billion). Ind-Ra expects ATL to maintain adequate equity visibility to part fund any new capex, and the absence of same could lead to a rating review.

ATL has commissioned four assets with a total asset base of INR29.6 billion in FY22 and expects to commission another three assets by 1QFY23. ATL has 10 project which are under-construction/ development (including HVDC). ATL has completed debt tie-up for all assets except for the three assets won during FY22. The HVDC project in Maharashtra, at a cost of about INR70 billion, has to be completed within four years from the receipt of transmission license in March 2021. According to ATL, no equity investment in AEML has been considered as AEML has sufficient funds to meet the equity requirement for its capex. The dividends from AEML might be received by ATL, which will further improve the funds for meeting capex.

Moderate Debt Structure: ATL's transmission business had a long-term debt of about INR157.9 billion and short-term facilities of INR4.4 billion at end-December 2021. ATL Obligor Group (ATLOG) had a long-term debt of INR70.8 billion (US dollar-denominated) at ATL's level at end-December 2021. Except for USD500 million (about INR37.2 billion) in ATL with a maturity in FY27, the debt is fully amortising with no bullet maturities. The US dollar denominated debt of INR104.4 billion has a fixed interest rate and is predominantly hedged for the currency risk for various tenors. The debt structure in ATL and its subsidiaries generally features debt/interest service reserve, dividend lock-up covenant and waterfall mechanism. The project life coverage ratio is likely to be above 1.40x in FYE22, given the proposed increase in regulated asset base by implementing the HVDC project.

Change in ATLOG Credit Neutral: ATL has proposed to change the structure of ATLOG such that ATL is excluded from the obligor group. As on 31 December 2021, ATLOG consisted of ATL, ATIL and MEGPTCL and had long-term US dollar-denominated debt INR70.8 billion (USD952.5 billion). ATL has proposed that its shareholding in ATIL and MEGPTCL will be transferred to Adani Transmission Step-One Limited (ATSOL) and the obligor group will contain ATSOL, ATIL and MEGPTCL. ATL will guarantee the obligations of ATSOL. These developments are credit neutral, as ATL's rating is not critically dependent on the covenants of ATLOG.

ATLOG's dollar bonds include a debt service coverage covenant of 1.10x. Being part of ATLOG, ATL is required to maintain three months' capex needs for ATL's under-construction projects in ATLOG's liquidity reserve account. After the change in ATLOG, the requirement to maintain three months' capex will apply only for any maintenance capex in ATIL and MEGPTCL and not for the entire group. ATSOL will have to maintain three months' capex requirement of ATIL and MEGPTCL. The waterfall mechanism operating in ATLOG for the rated debt ensures that cash flows from ATIL and MEGPTCL are available for servicing the rated debt before being invested in new projects or being used for any other purpose, after complying with the defined financial covenants.

Self-Insurance Reserve: ATL has opted for the concept of self-insurance reserve for transmission lines in 11 operational assets bid under the tariff-based competitive bidding route. This reserve has been created at ATL's level and only for the transmission lines, while sub-stations, associated cable connectivity and other capital equipment have been covered comprehensively under third-party insurance policies. ATL had created a reserve of INR186 million (equivalent to 0.30% of replacement value of transmission lines covered) as of 30 September 2021, and the same shall be increased to ultimately create a reserve equivalent to 0.50% of the replacement value of transmission lines covered. In case the self-insurance reserve is dipped into, ATL has to replenish the same. Transmission assets get the benefit of deemed availability in case affected by force majeure events, thus allowing for a continuous revenue recovery as long as the damaged assets are restored in a reasonable time. Historically, there has n0t been major incidents in ATL's transmission lines requiring substantial capex. Ind-Ra will monitor any addition of assets in a difficult or vulnerable terrain which could lead to any significant adhoc expenditure.

Increase in Intrastate Exposure May Increase Counterparty Risk: The revenue share of interstate and intrastate assets is 53% and 47%, respectively. The revenue share of intrastate assets is likely to increase to 48% in FY23 and above 60% in FY26 (on commissioning HVDC project in 2025). Intrastate counterparties are majorly discoms in Maharashtra, Uttar Pradesh (UP) and Rajasthan. The intrastate assets in Maharashtra have not experienced delays in payments 2016 onwards and the financial profile of

Maharashtra State Electricity Distribution Limited, having the highest share in intrastate assets, is also moderate. The working capital requirement in Ghatampur Transmission Limited and Obra C Badaun Transmission Limited may arise if UP discoms delay payments; ATL has also availed a one-year moratorium post the scheduled commercial operations date for these assets, thus enabling higher liquidity immediately after commissioning. In 9MFY22, ATL won three transmission assets through reverse bidding; the assets comprise two interstate and one intrastate projects with an estimated cost of INR14.0 billion and INR12.0 billion, respectively. Ind-Ra will review the impact of any deterioration in the payment profile or financial profile of the counterparties that account for over 25% of the revenue.

RATING SENSITIVITIES

Negative: One or more of the following events could lead to a negative rating action:
- ATL's leverage exceeding 5.5x on a sustained basis
- significant deterioration in ATL's consolidated credit profile due to any acquisition and delays/cost overrun in under construction projects
- the debt service coverage ratio falling below 1.25x
- a project life coverage ratio below 1.25x for the transmission assets

ESG ISSUES

ESG Factors Minimally Relevant to Rating: Unless otherwise disclosed in this section, the ESG issues are credit neutral or have only a minimal credit impact on ATL, due to either their nature or the way in which they are being managed by the entity. For more information on Ind-Ra's ESG Relevance Disclosures, please click here. For answers to frequently asked questions regarding ESG Relevance Disclosures and their impact on ratings, please click here.

COMPANY PROFILE

ATL is a holding company that was created to house the transmission assets of the Adani group. ATL, which operates about 13,830 circuit km and 19,280MVA of transmission assets, has 19 operating assets and 10 assets under construction. ATL obligor group includes ATIL and MEGPTCL. ATIL holds three transmission assets: 400kV Mundra-Dehgam line, around 500kV Mundra-Mohindergarh-Bhiwani line and 400kV Tiroda-Warora line. MEGPTCL holds the 765kV Tiroda-Aurangabad transmission asset and 765/400kV sub-stations.

FINANCIAL SUMMARY

Transmission business (Excluding AEML)

Particulars (INR billion)	**FY21**	**FY20**
Operating income	**31.2**	**27.9**
Total income	32.3	28.9
EBITDA	29.9	26.4
EBITDA margin (%)	92	91
Interest coverage (EBITDA/Interest, x)	2.9	2.4
Net leverage (net debt/EBITDA, x)	5.5	4.27
Cash and cash equivalents	3.95	18.1
Source: Company financials		

ATL consolidated

Particulars (INR billion)	**FY21**	**FY20**
Operating income	91.7	104.9
Total income	97.0	107.6
EBITDA	44.8	47.5
EBITDA margin (%)	46	44

Interest coverage (EBITDA/interest, x)	2.1	2.1
Net leverage (net debt/EBITDA, x)	6.0	4.6
Cash and cash equivalents	14.3	24.4
Source: Company financials		

RATING HISTORY

Instrument Type	Current Rating/Outlook			Historical Rating/Outlook					
	Rating Type	Rated Limits (million)	Rating	2 February 2021	17 April 2020	12 April 2019	6 March 2019	14 February 2019	20 July 2018
Issuer rating	Long-term	-	IND AA+/Stable	IND AA+/Stable	-	-	-	-	-
Working capital facility	Long-term	INR6,000	IND AA+/Stable	-	-	-	-	-	-
CP	Short-term	INR10,000	IND A1+	IND A1+	IND A1+	IND A1+	IND A1+	IND A1+	IND A1+

BANK WISE FACILITIES DETAILS

Click here to see the details

COMPLEXITY LEVEL OF INSTRUMENTS

Instrument	Complexity Indicator
Working capital facility	Low
CP	Low

For details on the complexity level of the instruments please visit https://www.indiaratings.co.in/complexity-indicators.

SOLICITATION DISCLOSURES

Additional information is available at www.indiaratings.co.in. The ratings above were solicited by, or on behalf of, the issuer, and therefore, India Ratings has been compensated for the provision of the ratings.

Ratings are not a recommendation or suggestion, directly or indirectly, to you or any other person, to buy, sell, make or hold any investment, loan or security or to undertake any investment strategy with respect to any investment, loan or security or any issuer.

ABOUT INDIA RATINGS AND RESEARCH

About India Ratings and Research: India Ratings and Research (Ind-Ra) is India's most respected credit rating agency committed to providing India's credit markets accurate, timely and prospective credit opinions. Built on a foundation of independent thinking, rigorous analytics, and an open and balanced approach towards credit research, Ind-Ra has grown rapidly during the past decade, gaining significant market presence in India's fixed income market.

Ind-Ra currently maintains coverage of corporate issuers, financial institutions (including banks and insurance companies), finance and leasing companies, managed funds, urban local bodies and project finance companies.

Headquartered in Mumbai, Ind-Ra has seven branch offices located in Ahmedabad, Bengaluru, Chennai, Delhi, Hyderabad, Kolkata and Pune. Ind-Ra is recognised by the Securities and Exchange Board of India, the Reserve Bank of India and National Housing Bank.

DISCLAIMER

Applicable Criteria

Evaluating Corporate Governance
Short-Term Ratings Criteria for Non-Financial Corporates
Rating Criteria for Infrastructure and Project Finance
Rating Criteria for Availability-Based Projects

Analyst Names

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Annexure-: Proposed year-wise network layout along with cluster name

Local Authority^^	Ward Nos. / Village Name	Name of the Ward, if any	Description if any	AENML Year	Tentatively Identified EHV Outlet
GP	Adai	V95	NA	7	
GP	Ajivali	V72	NA	5	
GP	Akurli	V94	NA	6	
GP	Ariwali	V71	NA	4	MSETCL ONGC
GP	Ashte	V74	NA	4	MSETCL ONGC
GP	Bambavi	V42	NA	2	Ulwe Node
GP	Belondakhar	V37	NA	4	Ulwe Node
GP	Bhandarli	V108	NA	8	
GP	Bhatan	V83	NA	4	MSETCL ONGC
GP	Bhendkhal	V15	NA	5	
GP	Bhingar	V73	NA	6	
GP	Bhingarwadi	V76	NA	6	
GP	Bokadvira	V12	NA	8	
GP	Boripakhadi	V4	NA	9	
GP	Borle	V69	NA	3	MSETCL ONGC
GP	Chanje	V7	NA	9	
GP	Chanje(Uran (M Cl))	V8	NA	9	
GP	Chikhale	V67	NA	2	MSETCL ONGC
GP	Chipale	V93	NA	5	
GP	Chirle	V35	NA	5	
GP	Chirvat	V59	NA	8	
GP	Dahisar	V103	NA	7	
GP	Dahisar Mori	V104	NA	8	
GP	Dahivali	V81	NA	8	
GP	Dapoli	V52	NA	3	Ulwe Node
GP	Derawali	V65	NA	3	MSETCL ONGC
GP	Devad	V89	NA	3	MSETCL ONGC
GP	Dhutum	V30	NA	3	Ulwe Node
GP	Dongari	V11	NA	7	
GP	Funde	V14	NA	6	
GP	Gavhan	V24	NA	2	Ulwe Node
GP	Giravale	V66	NA	8	
GP	Hanuman Koliwada	V5	NA	9	
GP	Harigram	V97	NA	7	
GP	Jasai	V26	NA	2	Ulwe Node
GP	Jaskhar	V17	NA	6	
GP	Juna Sheva	V16	NA	7	
GP	Kaladhonda	V9	NA	8	

Local Authority^^	Ward Nos. / Village Name	Name of the Ward, if any	Description if any	AENML Year	Tentatively Identified EHV Outlet
GP	Karal	V18	NA	4	Uran EHV
GP	Karanjade	V55	NA	4	Ulwe Node
GP	Kasal Khand	V78	NA	4	MSETCL ONGC
GP	Kauli Bandhankhar	V36	NA	4	Ulwe Node
GP	Kauli Belodakhar	V38	NA	4	Ulwe Node
GP	Kegaon (CT)	V1	NA	9	
GP	Kevale	V99	NA	8	
GP	Khanavale	V79	NA	5	
GP	Kharkopar	V25	NA	1	Ulwe Node
GP	Nighugaon	V106	NA	8	
GP	Kolkhe	V62	NA	2	MSETCL ONGC
GP	Kon	V68	NA	3	MSETCL ONGC
GP	Kopar	V53	NA	1	Ulwe Node
GP	Koproli	V98	NA	6	
GP	Kudave	V61	NA	4	MSETCL ONGC
GP	Kundevahal	V43	NA	3	Ulwe Node
GP	Manghar	V44	NA	6	
GP	Mhatwali	V6	NA	9	
GP	Mohope	V80	NA	7	
GP	Mokashi	V107	NA	8	
GP	Mosare	V45	NA	6	
GP	Muthekhar	V29	NA	3	Ulwe Node
GP	Nagaon	V3	NA	9	
GP	Nandgaon	V56	NA	4	MSETCL ONGC
GP	Nanoshi	V47	NA	7	
GP	Narpoli	V82	NA	8	
GP	Navali	V105	NA	8	
GP	Navghar	V19	NA	5	
GP	Navin Sheva	V13	NA	8	
GP	Nevali	V96	NA	7	
GP	Nhave	V20	NA	3	Ulwe Node
GP	Owle	V48	NA	1	Ulwe Node
GP	Padeghar	V34	NA	2	Ulwe Node
GP	Pagote	V23	NA	4	Uran EHV
GP	Palaspe	V63	NA	4	MSETCL ONGC
GP	Pale Bk.	V100	NA	8	
GP	Palidevad	V90	NA	5	
GP	Panje	V10	NA	7	
GP	Pargaon	V51	NA	2	Ulwe Node
GP	Pargaon Dungi	V50	NA	1	Ulwe Node
GP	Patnoli	V46	NA	7	

Local Authority^^	Ward Nos. / Village Name	Name of the Ward, if any	Description if any	AENML Year	Tentatively Identified EHV Outlet
GP	Paundkhar	V31	NA	4	Ulwe Node
GP	Pimpri	V102	NA	8	
GP	Poyanje	V85	NA	7	
GP	Raichur	V92	NA	5	
GP	Ranwad	V2	NA	9	
GP	Sangade	V70	NA	6	
GP	Sangurli	V60	NA	8	
GP	Sawarkhar	V22	NA	3	Uran EHV
GP	Shedung	V75	NA	5	
GP	Shematikhar	V27	NA	3	Ulwe Node
GP	Shilottar	V91	NA	5	
GP	Shirdhon	V64	NA	8	
GP	Shivkar	V87	NA	4	MSETCL ONGC
GP	Somtane	V77	NA	8	
GP	Sonari	V21	NA	7	
GP	Sonkhar	V33	NA	1	Ulwe Node
GP	Talegaon	V84	NA	6	
GP	Targhar	V40	NA	1	Ulwe Node
GP	Turmale	V58	NA	8	
GP	Ulawe	V41	NA	1	Ulwe Node
GP	Usarli Khurd	V86	NA	2	MSETCL ONGC
GP	Vadavali	V57	NA	8	
GP	Vadghar	V54	NA	4	Ulwe Node
GP	Vaghivali	V49	NA	1	Ulwe Node
GP	Valap	V101	NA	8	
GP	Veshvi	V39	NA	5	
GP	Vichumbe	V88	NA	3	MSETCL ONGC
GP	Wahal	V32	NA	1	Ulwe Node
GP	Waltikhar	V28	NA	3	Ulwe Node
MCGM	53	Goregaon	Area adjoining to AEML DL Boundary, Filter Pada, Maroshee Pada, Sahi Banguda, Passpoli, Mahatma Phule Nagar (Part) etc	3	AEML Aarey
MCGM	103	Mulund	Ghati Pada, Warli Pada, Agfa Colony, Veena Nagar, Govardhan Nagar etc	7	
MCGM	104	Mulund	Tambe Nagar, Sidharth Nagar, Indira Nagar, Ashok Nagar etc.	6	
MCGM	105	Mulund	LIC Housing Colony, Sane Guruji Nagar, Saidham Society, Navghar, Mhada Colony etc.	4	MSETCL Mulund

Local Authority^^	Ward Nos. / Village Name	Name of the Ward, if any	Description if any	AENML Year	Tentatively Identified EHV Outlet
MCGM	106	Mulund	Gavanpada, Neelam Nagar, Deendayal Nagar, Mahakali Nagar, Arunoday Nagar, Hanuman Chowk etc.	4	MSETCL Mulund
MCGM	107	Mulund	Keshav Pada, Vidya Vihar, St Pius Colony, Sarvoday Nagar (Part), Hira Nagar etc.	6	
MCGM	108	Mulund	Hanuman Pada, Rahul Nagar, Amar Nagar, Asha Nagar, Mulund Colony, Sarvoday Nagar (Part) etc.	5	
MCGM	109	Bhandup	Shreeram Pada, Tulshet Pada, Tembhi Pada (Part), Tanajwadi etc.	7	
MCGM	110	Bhandup	Azad Nagar, MMRDA Colony, Nahur, Rajiv Gandhi Nagar etc.	5	
MCGM	111	Bhandup	Bhavani Nagar, Tata Nagar, Friends Colony, Bhandup (East) , Nahur East (Part), Kanjur Village (Part), Ashok Nagar (Part), Udayshree Colony etc	1	MSETCL Mulund
MCGM	112	Bhandup	Usha Nagar, Shivram Durgude Chawl, Valmik Nagar, Jaydev Singh Nagar, Dreams, Bhandup West etc.	4	AEML Aarey
MCGM	113	Bhandup	Tembipada (Part), Gautam Nagar, Sadan Wadi, Lokmanya Nagar, Gaon Devi etc.	6	
MCGM	114	Bhandup	Anand Nagar, Sarvoday Nagar, Marathon, Kranti Nagar, Ambedkar Nagar etc.	7	
MCGM	115	Bhandup	Kokan Nagar, Samrth Nagar, Ganesh Nagar, Utkarsh Nagar, Jamil Nagar (Part) etc.	6	
MCGM	116	Bhandup	Hanuman Tekdi, Pratap Nagar, New Colony, Jyotiba Phule Nagar, NCH Colony etc.	8	
MCGM	117	Bhandup	Kanjur Village (Part), Shastri Nagar, Saikrupa Society, Kanjurmarg East, Nehru Nagar etc.	2	MSETCL Mulund
MCGM	118	Bhandup	MCGM SWM	2	MSETCL Mulund
MCGM	120	Bhandup	Ambedkar Nagar, Kanjur Marg West (Part), Laxmi Udyog Nagar etc	4	AEML Aarey

Local Authority^^	Ward Nos. / Village Name	Name of the Ward, if any	Description if any	AENML Year	Tentatively Identified EHV Outlet
MCGM	121	Bhandup	Area adjoining to AEML DL Boundary, Murarji Nagar, Milind Nagar, Manohar Nagar, Mahatma Phule Nagar, Peru Baug, IIT, Krishna Nagar etc.	4	AEML Aarey
NMMC	1	Ishwar Nagar	Anand Nagar, Ishwar Nagar (Part), Bali Nagar, Mukund Colony.	2	MSETCL Airoli Knowledge Park
NMMC	2	Ram Nagar	Ishwar Nagar (Part), Ram Nagar, Mukund Company.	1	MSETCL Airoli Knowledge Park
NMMC	3	Digha-1	Digha, Ganesh Nagar, Ganpati Pada, Phule Nagar, Savitri Nagar, Bindumadhav Nagar.	1	MSETCL Airoli Knowledge Park
NMMC	4	Digha-2	Sathe Nagar,Vishnu Nagar, Vijay Nagar, Ramaji Ambedkar Nagar, Pandhrinagar (Part), Digha (East)	2	MSETCL Airoli Knowledge Park
NMMC	5	Ilthan	Ilthanpada, Subhash Nagar, Pandhari Nagar (Part)	4	MSETCL Airoli Knowledge Park
NMMC	6	Yadav Nagar	Yadav Nagar, Ashwini quarry.	4	MSETCL NOCIL
NMMC	7	Chinch pada	Chinchpada (Part), Ganesh Nagar.	3	MSETCL NOCIL
NMMC	8	Chinch pada-Gavate wadi	Gavate Wadi, Chinchpada (Part)	4	MSETCL Airoli Knowledge Park
NMMC	9	Digha-3	Digha (Part), NamdeoNagar, Sanjay Gandhi Nagar.	1	MSETCL Airoli Knowledge Park
NMMC	10	Airoli Node-1	Sector 20 B (Part), Sector 1A, 1 (Part) & Shiv Colony.	5	
NMMC	11	Airoli gaon	Airoligaon, Deshmukh wadi, Sainathwadi Sector 20 (Part)	5	
NMMC	12	Airoli Node-2	Sector 2, Sector 1 (Part).	5	
NMMC	13	Airoli Node-3	Sector 3	5	
NMMC	14	Airoli Node-4	Sector 19 & Sector 20 (Part).	5	
NMMC	15	Airoli Node-5	Sector 12, 13, 14, 15, Sector 16 (Part) and Sector 18 (Part)	6	
NMMC	16	Airoli Node-6	Sector 18 (Part), Sector 17, Sector 4 (Part) & Sector 16 (Part).	6	

Local Authority^^	Ward Nos. / Village Name	Name of the Ward, if any	Description if any	AENML Year	Tentatively Identified EHV Outlet
NMMC	17	Airoli Node-7	Sector 4 (Part)	6	
NMMC	18	Airoli Node-8	Sector 5, Sector 6 (Part), Sector 7 (Part) & Sector 4 (Part).	7	
NMMC	19	Dr. Ambedkar Nagar	Katakaripada, Ambedkar Nagar, Gandhi Nagar.	3	MSETCL NOCIL
NMMC	20	Bhim Nagar (Panch sheel Nagar)	Bhim Nagar, PanchsheelNag ar, NibbanTekadi, Saibaba Nagar (Part)	3	MSETCL NOCIL
NMMC	21	Airoli Node-9	Sector 7(Part), Sector 8A (Part), Sector 9 (Part) & Sector 8 (Part)	7	
NMMC	22	Divagaon	Sector 9 (Part) Divagaon, , Sector 8 (Part) & Sector 8A (Part)	7	
NMMC	23	Airoli Node-10	Sector 10, Sector 10A (Part) Sector 11 & Sector 9 (Part)	7	
NMMC	24	Rabale	RabadaGaotha n (Part) &GothivaliGao nthan (Part)	7	
NMMC	25	Gothiv ali	RabadaGaotha n(Part), GothivaliGaoth an(Part), Nocil Colony, Golden Nagar (Part), Nocil Naka &Talavali Naka (Part)	7	
NMMC	26	Mahape	Mahape, Adavali- Bhutwali, MIDC (Part),Hanuman Nagar, Sambhaji Nagar, Warlipada	1	MSETCL Mahape
NMMC	27	Talavali Naka	Ghansoli Naka (Part), Dattnagar (Part), Talvali Naka (Part), Golden Nagar (Part), Arjun Wadi.	7	
NMMC	28	Ghansoli-1	Talavaligaonth an (Part), Ghansoli gaonthan (Part), Datta Nagar (Part) & Golden Nagar (Part)	7	
NMMC	29	Ghansoli-2	Talavaligaonth an (Part), Ghansoli gaonthan (Part).	7	
NMMC	30	Ghansoli-3	Talvaligaontha n (Part), Ghansoli gaonthan (Part).	6	
NMMC	31	Ghansoli Node-1	Ghansoli gaon (Part), Sector 8, Sector 11,Sector 12 & 12A.	6	
NMMC	32	Ghansoli Node-2	Sector 6, Ghansoli gaon (Part) & Ghansoli Naka (Part).	5	
NMMC	33	Ghansoli Node-3	Sector 5, Sector 4, Sector 6 (Part) & Sector 3 (Part)	5	
NMMC	34	Ghansoli Node-4	Sector 7 (Part)	6	

Local Authority^^	Ward Nos. / Village Name	Name of the Ward, if any	Description if any	AENML Year	Tentatively Identified EHV Outlet
NMMC	35	Ghansoli Node-5	Sector 9 & Sector 7 (Part)	6	
NMMC	36	Ghansoli Node-6	Sector 1,Sector 3 (Part) & Sector 4 (Part)	5	
NMMC	37	Koparkhairane Node-1	Koparkhairane Sector 1, 1A, Sector 2A & Sector 4 (Part.)	3	MSETCL Mahape
NMMC	38	Koparkhairane Node-2	Koparkhairane Sector 2, 2A (Part) & Sector 3 (Part)	3	MSETCL Mahape
NMMC	39	Koparkhairane GES	GES Sector 19 (Part). & Sector 20, GES, CIDCO Holding Pond.	4	MSETCL Mahape
NMMC	40	Koparkhairane Gaon-1	Koparkhairane gaonthan (Part), Koparkhairane Sector 19 GES (Part) & Sector 18 (Part), Sector 15 (Part)	4	MSETCL Mahape
NMMC	41	Koparkhairane Gaon-2	Koparkhairane gaonthan (Part), Koparkhairane Sector 19 GES (Part).	4	MSETCL Mahape
NMMC	42	Koparkhairane Node 3	Koparkhairane Sector 22 & Sector 23 &Koparkhaira ne Sector 16 (Part) & Sector 17 (Part).	5	
NMMC	43	Koparkhairane Node 4	Koparkhairane Sector 17 (Part) & Sector 18 (Part).	4	MSETCL Mahape
NMMC	44	Koparkhairane Node-5	Koparkhairane Sector 15 (Part), Sector 16 (Part) Sector 7 (Part).	5	
NMMC	45	Koparkhairane Node-6	Koparkhairane Sector 6 (Part), Sector 3 (Part) & Sector 7 (Part)	3	MSETCL Mahape
NMMC	46	Koparkhairane Node-7	Koparkhairane Sector 4 (Part), Sector 5 (Part), Sector 8 (Part) and Koparkhairane Rly. Station area.	3	MSETCL Mahape
NMMC	47	Koparkhairane Node-8	Koparkhairane Sector 8 (Part) Sector 7 (Part) & Sector 5 (Part)	5	
NMMC	48	Koparkhairane MIDC (Pawane)	MIDC,D& C (Part),Pawane gaon, Shramik Nagar, Katkaripada, (Khairane)	2	MSETCL Mahape
NMMC	49	Koparkhairane Node-9	Koparkhairane Sector 9, Sector 10, Sector 12 Khairane GES (Part)	5	
NMMC	50	Sector 12 (GES) Bonko degaon	Bonkodegaon. Sector 12 GES (Part)	6	
NMMC	51	Koparkhairane Node- 10	Koparkhairane Sector 13, Sector 12 GES (Part), Sector 11 (Part)	6	

Local Authority^^	Ward Nos. / Village Name	Name of the Ward, if any	Description if any	AENML Year	Tentatively Identified EHV Outlet
NMMC	52	Koparkhairane Node- 11	Koparkhairane Sector 14, Sector 15 (Part) and Sector 16 (Part)	6	
NMMC	53	Juhugaon-1	Juhugaon (Part) & Vashi Sector 12.	6	
NMMC	54	Vashi Node-1	Vashi Sector 28, Sector 29, Sector 14 (Part)	6	
NMMC	55	Khairanegaon	Koparkhairane Sector 11 (Part), Sector 12 GES (Part), Khairanegaon,	6	
NMMC	56	Koparigaon	Koparigaonthan, Sector 26 (Part) & GES Sector 27 Vashi (Part)	5	
NMMC	57	APMC Market	APMC Market Sector 19, 19C, 19B, 19D, 19E, Sector 18, Sector22 (Part), Sector 26 (Part)& Sector 24 (Part)	5	
NMMC	58	Vashi Node-2	Vashi Sector 14 (Part) & Sector 15 (Part)	6	
NMMC	59	Juhugaon-2	Juhugaon (Part) & Vashi Sector 10 (Part)	6	
NMMC	60	Vashi Node-3	Vashi Sector 9A, 10A, 9 (Part) & Sector 2 (Part)	7	
NMMC	61	Vashi Node-4	Vashi Sector 9 (Part) & Sector 10 (Part)	7	
NMMC	62	Vashi Node-5	Vashi Sector 15 (Part), Sector 16 & Sector 16A.	7	
NMMC	63	Vashi Node-6	Vashi Sector 1 (Part), Sector 2 (Part), & Sector 17.	7	
NMMC	64	Vashi Node-7	Vashi Sector 3, 4, 1A, 5, 6,7(part) & 8(part)	7	
NMMC	65	Vashigaon	Vashi gaonthan, Vashi Sector 31, GES, Sector 30A, Sector 30 & Sector 7 (Part)	3	MSETCL Sonkar
NMMC	66	Turbhegaon	Turbhegaontha n, Sector 22 (Part)& Sector 24 (Part)	6	
NMMC	67	Turbhe	Turbhe Sector 19A, 19F (Part), Sector 20, Turbhe Rly. Station, Rly. Yard Sector 25 (Part) & Sector 21 (Part)	6	
NMMC	68	Turbhe Store-2	Turbhe Store (Part) & MIDC Area (Part).	5	
NMMC	69	Indira nagar	Indiranagar, Ganpatipada, Warlipada& MIDC area (Part)	1	MSETCL Mahape
NMMC	70	Turbhe Store-1	TurbheStore (Part)	5	
NMMC	71	Hanuman Nagar, Turbhe	Hanuman Nagar (Turbhe) MIDC area (Part)	5	

Local Authority^^	Ward Nos. / Village Name	Name of the Ward, if any	Description if any	AENML Year	Tentatively Identified EHV Outlet
NMMC	72	Turbhe Service Industries	Sector 21 (Part), Sector 22 (Part), Sector 23 & 24.	6	
NMMC	73	Ambedkar Nagar, Ganesh Nagar	Ambedkar Nagar, Ganesh Nagar, Indira Nagar (Part)	5	
NMMC	74	Sanpada Node-1	Sanpada Sector 6, Sector 5 (Part)& Sector 10 (Part)	4	MSETCL Sonkar
NMMC	75	Sanpadagaon	Sanpadagaon, Sanpada GES, Sector 5 (Part) & Sector 4 (Part).	4	MSETCL Sonkar
NMMC	76	Sanpada Node-2	Sanpada Sector 2,3,4 & 8 (Part)	4	MSETCL Sonkar
NMMC	77	Sanpada Node-3	Sanpada Sector 13, 14, 1 & 15.	3	MSETCL Sonkar
NMMC	78	Sanpada Node-4	Sanpada Sector 16,17,18, 19,22 & 23 (Part)	3	MSETCL Sonkar
NMMC	79	Sanpada Node- 5	Sanpada Sector 7, 8 (Part), 9, 10(Part)	4	MSETCL Sonkar
NMMC	80	Shivaji Nagar	MIDC D Block (Part), Bonsari, Shivaji Nagar, Mahatma Gandhi.Nagar	4	MSETCL Nerul
NMMC	81	Shirvane-1	Shirvanegaon (Part), Sector 1GES (Part)	5	
NMMC	82	Sanpada Node-6	Nerul Sector 2 (Part), SanpadaSector 25 (Part) & Sector 24.	5	
NMMC	83	Jui Nagar	Juipadagaon& GES Sector 23, Sanpada.	5	
NMMC	84	Nerul Node-1	Nerul Sector 2 (Part), Nerul Sector 4, Sanpada Sector 21 & Sector 25 (Part).	6	
NMMC	85	Nerul Node-2	Nerul Sector 14, Sector 6, Sarsole GES, &Sarsolegaon (Part).	6	
NMMC	86	Sarsole	Nerul Sector 6 (Part) Sarsolegaon (Part) &Sarsole GES (Part)	6	
NMMC	87	Nerul Node-3	Nerul Sector 8 & Sector 10 (Part)	6	
NMMC	88	Nerul Node-4	Nerul Sector 15 (Part), Sector 11 (Part), Sector 3 & Sector 29	6	
NMMC	89	Shirvane- 2	Shirvanegaon (Part), Shirvane GES Sector1(Part).	5	
NMMC	90	Nerul Node-5	Nerul Sector 7, Sector 5, Sector 9, Sector 11 (Part) & Sector 15 (Part) & Sector 1A (Part)	5	
NMMC	91	Nerul Node-6	Nerul Sector 13, 17, 19 (Part) & sector 21 (Part).	4	MSETCL Nerul

Local Authority^^	Ward Nos. / Village Name	Name of the Ward, if any	Description if any	AENML Year	Tentatively Identified EHV Outlet
NMMC	92	Darave	Nerul Sector 21 (Part), Daravegaon& Sector 23 GES (Part)	3	MSETCL Nerul
NMMC	93	Nerulgaon -1	Nerul Sector 20 (Part) & Sector 10 (Part).	6	
NMMC	94	Nerul Node-7	Nerul Sector 10 (Part).	6	
NMMC	95	Nerulgaon -2	Nerul Sector 12, Sector 10 (Part), Nerul gaon(Part) & Sec-20 (Part)	6	
NMMC	96	Nerul Node-8	Nerul Sector 18 (Part) , Sector 16 & Sector 16A.	7	
NMMC	97	Nerul Node-9	Nerul Sector 18 (Part), 18A, 24 & 20	7	
NMMC	98	Nerul Node-10	Nerul Sector 26, 28, 22, 40, & 42.	7	
NMMC	99	Nerul Node- 11	Nerul Sector 25, 27& 23 (Part).	3	MSETCL Nerul
NMMC	100	Nerul Node-12	Nerul Sector 19(Part), 19A & Sector 21.	3	MSETCL Nerul
NMMC	101	Belapur Node-1	Belapur Sector 10, 21, 22, 23, 24, 25, 26, 28, 29, 30 & 31	4	MSETCL Nerul
NMMC	102	Belapur Node-2	Belapur Sector 9, 9N, 1, 1A(Part),sector 2& 3	4	MSETCL Nerul
NMMC	103	Belapur Node-3	Belapur Sector 8, 8A, 8B (Part), Ramabai Nagar, Sambhaji Nagar, Jaidurgamata Nagar& Sector 3A(Part)	4	MSETCL Nerul
NMMC	104	Belapur Node-4	Belapur Sector 3A (Part), 4, 5, 6& 8B (Part)	5	
NMMC	105	Diwale	Diwalegaon, Sector 11, 12, 13&19/ 20 (Part).	5	
NMMC	106	Belapur Shahabaj	Belapurgaon, Shahbajgaon& Fanaspada Sector19/ 20 GES (Part)	5	
NMMC	107	Belapur Node-5	Belapur Sector 15,15A, 32, Killegaothan, Nerul Sector 52, 50, 54, 58 & 52A.	5	
NMMC	108	Nerul Node-13	Nerul Sector 48 & 50 (Part)	6	
NMMC	109	Nerul Node-14	Nerul Sector 38, 42A, 48A, 44 (Part)	6	
NMMC	110	Karave	Karavegaon& Nerul Sector 36 (Part) Sector 32 & 30.	6	
NMMC	111	Nerul Node-15	Sector 58A, Nerul, Sector 46, 46A, Sector 36 (Part),Sector 44 (Part), Sector 44A, & Sector 50 (Part)	6	
PMC	1		Adivali, Beed, Rohinjan, Dhansar, Owe, Pisarve.	4	MSETCL Kharghar

Local Authority^^	Ward Nos. / Village Name	Name of the Ward, if any	Description if any	AENML Year	Tentatively Identified EHV Outlet
PMC	2		Turbhe, Karvale Budruk, Taloje Majkur, Taloje Pachanand.	4	MSETCL Kharghar
PMC	3		Nagzari, Chaal, Ghot, Tondare, Devicha Pada, Palekhurd.	1	MSETCL Taloja
PMC	4		Pendhar, Koynavele, Navade.	1	MSETCL Taloja
PMC	5		Kharghar - Sector-24 (Part), 15, 16, 17, 18, 19, 20 (Part), D Mart, Spaghetti Housing Complex, Vastu Vihar.	2	MSETCL Kharghar
PMC	6		Kharghar Village, Kharghar Sector-20 (Part), 13, 14.	3	MSETCL Kharghar
PMC	7		Kharghar Sector-5, 6, 12, 21, Phanas Wadi, Chaphe Wadi.	4	MSETCL Kharghar
PMC	8		Kharghar Sector-7, 11, 12 (Part), 13, 15 (Part).	1	MSETCL Kharghar
PMC	9		Kharghar Sector-10, 9, 1, 2, 8, 3, 4, 5 (Part), Kopra Gaon, Belpada Gaon.	1	MSETCL Kharghar
PMC	10		Khidukpada, Rodpali, Kalamboli Sector- 7E, 8E, 9E, 10E, 13, 14, 12, 15, 16E, 18, 17, 19, 20, 21, Rodpali Bouddh Wadi, Khidukpada Wadi (Katkari Wadi).	6	
PMC	11		Padghe, Walvali, Tembhode, Asudgaon (Part), New Panvel (E.) Sector-5A, 6, 7. Roadpali.	2	MSETCL Taloja
PMC	12		Kalamboli Warehousing Complex (Part), Kalamboli Village, Kalamboli Sector-1, 1E, 2E, 2 (Part), Jadhav Wadi.	7	
PMC	13		Kalamboli Warehousing Complex (Part), Kalamboli Sector-2E, 3E, 4E, 5E, 6E, 7E (Part). Roadpali	7	
PMC	14		Kalamboli Sector-1, 2, 3, 4, 5, 6, 8. Roadpali	6	
PMC	15		Kalamboli Sector-6, 7, 10, 11, 9, 22, 23, Roadpali.	6	
PMC	16		Kamothe Sector-41, 36, 37, 35, 34, 38, 33, 39, 40 to 48, Mansarovar Railway Station, Jui Village.	5	
PMC	17		Kamothe Sector-6A, 7, 6, 5, 8, 9.	5	

Local Authority^^	Ward Nos. / Village Name	Name of the Ward, if any	Description if any	AENML Year	Tentatively Identified EHV Outlet
PMC	18		Kamothe Sector-11, 10, 15, 14, 12, Kamothe Village.	5	
PMC	19		Kamothe Sector-1, 2, 3, 4, 20, 16, 17, 18,19, 31, 21, 22, 23, 24, New Panvel (W.), Sector-18, Navpada Village, MGM Hospital, Jawahar Industrial Area.	4	MSETCL Timber Market EHV
PMC	20		New Panvel (W.) Khanda Colony, Sector-6, 7, 9, Asudgaon Village, Asudgaon Sector-4, 4A, 4B, 5.	4	MSETCL Timber Market EHV
PMC	21		Panvel, Khandeshwar Railway Station, Kamothe Sector-25 to 30, 49 to 54, New Panvel (W.), Sector-16, Sector-17, Motha Khanda, Dhakta Khanda, Kinara Society, Sai Nagar, 52 Bunglow, Tahsil Office, Panvel City Police Station.	4	MSETCL Timber Market EHV
PMC	22		Panvel Khanda Colony, New Panvel (W.), Sector-1, 2, 6, 8, 13, 14, 10, 11, 12, 15, Panvel Industrial Area.	3	MSETCL Timber Market EHV
PMC	23		Panvel – New Panvel (West) Sector-5, 4, 3, 2, 1, 15, 19.	3	MSETCL ONGC
PMC	24		Panvel - New Panvel (E) Sector-8, 9, 10, 11, 1(Part).	4	MSETCL ONGC
PMC	25		Panvel–New Panvel (East) Sector-12, 19, 13, 14, 17, 18, 16(Part), Podi No-3, Panchsheel Nagar Jhopadpatti.	4	MSETCL ONGC
PMC	26		Panvel Takka Village, Shivaji Nagar Jhopadpatti, Panvel Bus Stand, Azad Nagar Jhopadpatti, Maldhakka Jhopadpatti, Panvel Railway Station, Podi No. 1, 2, 2 ½, New Panvel (E.), Sector-15, 15A, 16, New Panvel (W.), Sector-20, 21.	5	

Local Authority^^	Ward Nos. / Village Name	Name of the Ward, if any	Description if any	AENML Year	Tentatively Identified EHV Outlet
PMC	27		Panvel Prant office, Sahashrabuddhe Hospital, Wadale talav, Mahatma Gandhi Garden, Swatantraveer Sawarkar Chowk, V.K. High School, Maharashtra Bhusan Dr. Nanasaheb Dharmadhikari Hospital, Walmiki Nagar, Pardeshi Ali	3	MSETCL Timber Market EHV
PMC	28		Panvel Middle Class Society Ground, Panvel Panchayat Sameeti Karyalaya, Gandhi Hospital, Life line Hospital, Mhatre Hospital, Agri Samaj Hall, Mahapalika Dawakhana, Apte House, Gavdevi Mandir, Chatrapati shivaji Maharaj Ground, Laxmi vasahat zopadpatti, Middle Class society area.	5	
PMC	29		Panvel Kalpataru River View, Kokilwada Market Yard, Kacchi Mohalla, Patel Mohalla, Bhusar Mohalla, Kumbharwada, Mirchi Galli, Bagwan Mohalla, Rohidas wada, BP Marine Acadamy, Urdu School, Yakub Beg High school, Pada Mohalla Masjid.	6	
PMC	30		Panvel (Group Nos. 354, 356, 355, 358, 357, 359, 363, 360, 362, 364, 361, 367, 366, 365, 368, 369) Kalundre (Group Nos. 4, 1, 2, 3/1, 3/2, 5, 6, 7, 8, 9, 14).	6	
TMC	1		TMC Octrai Naka, Nagla Bunder, Bhainderpada, Kasar Vadavali, Anand Nagar, Kasar Vadavali,Waghbill etc..	2	MSETCL Roma
TMC	2		Vasant Leela, Vijay Enclave, Patli Pada, Bramhand, Akbar Camp, Azad Nagar etc..	1	MSETCL Roma
TMC	3		Manpada, Manorama Nagar, Bramhand Junction, Vardhaman Vatika etc..	2	MSETCL Roma
TMC	4		Neelakantha Woods, Tiki Jini Wadi, Hill Garden, Lok Upavan II, Nalpada etc..	3	MSETCL Kolshet

Local Authority^^	Ward Nos. / Village Name	Name of the Ward, if any	Description if any	AENML Year	Tentatively Identified EHV Outlet
TMC	5		Kokani Pada, Yeur, Upavan, Pawar Nagar, Vasant Vihar etc..	3	MSETCL Kolshet
TMC	6		Rambuag, Pariera nagar, Rifle Range, Shashtri Nagar, Dawale Nagar etc..	3	MSETCL Kolshet
TMC	7		Suresh Park, Vartak Nagar MHADA, Chirag Nagar, Vijay Nagar, Ramchandra Nagar etc..	4	MSETCL Colorchem
TMC	8		Kolshet Ganesh Ghat, Taricha Pada, Balkum, Kapurbavdi Naka, Clareint etc..	1	MSETCL Roma
TMC	10		Rehmat Nagar, Rabod, AkashGanga Society, Kranti Nagar etc..	6	
TMC	11		Sumer Complex, Bramhala Lake,Mahimi Chawk, Vrindavan Complex etc..	6	
TMC	12		Namdeo Wadi, Sidhdheshwar Lake, TMC Head Office etc..	5	
TMC	13		Tarangan Complex, Ambika Nagar, Garodiya Society, etc..	5	
TMC	14		Karwalo Nagar, Kores Nakshatra, Dosti Vihar etc..	4	MSETCL Colorchem
TMC	15		Hanuman Nagar, Indira Nagar, Sathe Nagar,Ambe Wadi etc..	4	MSETCL Colorchem
TMC	16		Warli Pada, Ram Nagar, C P Talao etc	4	MSETCL Colorchem
TMC	17		Kaju Wadi, Nehru Nagar, Agriculture College, Jai Bhawani Nagar etc..	4	MSETCL Colorchem
TMC	18		Padwal Nagar, Kelkar etc..	5	
TMC	19		Hajuri, Sreesh Society, Highway Darshan Soc, Kashish Park, Sathe Wadi etc..	5	
TMC	20		Parsi Wadi, Kopri Colony, Anand Nagar Check Naka etc..	7	
TMC	21		Dr Ambedkar Chawk, Hari Niwas Chawk, Masunda, Gadakari Rangayatan etc..	7	
TMC	22		Dadoji Konddev Stadium, Chendani(W) etc..	7	

^^ GP - Gram Panchayat; NMMC - Navi Mumbai Municipal Corporation; TMC - Thane Municipal Corporation ; PMC - Panvel Municipal Corporation ; MCGM - Municipal Corporation of Greater Mumbai

Phase-1 network rollout plan (Year -1 & Year -2) is based in following factors,

- 19 nos. of 33-22kV Outlets available at STU EHV RSS (Please refer Bay List Final-MTR Petition FY 21 to FY 25)
- Projection of MVA addition in FY by commissioning of new substation in FY 22-23 (Please refer MTR 2022 Capex Sheet-MTR Petition FY 21 to FY 25)

Phase-2 network rollout plan (Year -3 & Year -4) is based in following factors,

- Projection of MVA addition in FY by capacity addition against augmentation work (Please refer MTR 2022 Capex Sheet-MTR Petition FY 21 to FY 25)

Extracts from MSETCL MTR Petition FY2021-FY25 Case 232 of 2022, Annexure 1 – MTR2022 – Capex sheet

Substations falling in proposed license area have been highlighted with an arrow ←

MVA addition against Augumentation work				
Sr. No.	**Voltage Level**	**Name of substation**	**MVA**	
1	400kV	400kV Akola	500	
2	400kV	400kV Babhleshwar	185	
3	400kV	400kV Khadka	315	
4	400kV	400kV New Koyna	315	
5	220kV	220kV Malegaon	100	
6	220kV	220kV Anjangaon	100	
7	220kV	220kV Balapur	100	
8	220kV	220kV Malegaon	50	
9	220kV	220kV Bhose	50	
10	220kV	220 KV Chalisgaon	200	
11	220kV	220kV Bhalwani	50	
12	220kV	220kV Satara MIDC	100	
13	220kV	220kV Niwaliphata	100	
14	132kV	132kV Gunj	50	

MVA addition against Augumentation work				
Sr. No.	**Voltage Level**	**Name of substation**	**MVA**	
15	132kV	132kV Chandurbazar	50	
16	132kV	220kV Jalkot	25	
17	132kV	132kV Kedgaon	50	
18	132kV	132kV Walchandnagar	25	
19	132kV	220/132kV Ambazari	50	
20	100kV	220kV Kolshet	50	←
		Total	**2465**	
FY 2023-24				
MVA addition against Augumentation work				
Sr. No.	**Voltage Level**	**Name of substation**	**MVA**	
1	400kV	400kV Thapti Tanda	500	
2	400kV	400kV Nagothane	185	
3	400kV	400kV Padghe	185	
4	220kV	400kV Waluj	50	
5	220kV	220kV Jalna	100	
6	220kV	400kV Lonikand	50	
7	220kV	400kV Kharghar	50	←
8	220kV	220kV Nanded City	50	
9	220kV	220kV Tembhurni	25	
10	220kV	220kV Walchandnagar	100	
11	220kV	220kV Pandharpur	100	
12	220kV	220kV Vairag	50	

MVA addition against Augumentation work				
Sr. No.	**Voltage Level**	**Name of substation**	**MVA**	
13	220kV	220kV Bhigwan	25	
14	220kV	220kV Jeur	100	
15	220kV	220kV Five Star MIDC	50	
16	220kV	220kV Jambhul	100	
17	220kV	220kV ONGC Panvel	50	←
18	220kV	220kV Anandnagar	50	
19	220kV	220kV Boisar-II	50	
20	220kV	220kV Temghar	50	
21	220kV	220kV Kolshet	50	←
22	220kV	220kV Mahape	100	←
23	220kV	220kV Colourchem	100	←
24	220kV	220kV Bapgaon	50	
25	220kV	220kV Nalasoparsa	100	
26	132kV	132kV Vaijapur	50	
27	132kV	132kV Harsool	50	
28	132kV	132kV Satara (Deolai)	50	
29	132kV	132kV Udgir	25	
30	132kV	132kV Nilanga	50	
31	132kV	132kV Dindori	50	
32	132kV	132kV Motala	25	
33	132kV	132kV Washim	25	
34	132kV	132kV Risod	25	
35	132kV	132kV Umerkhed	25	

MVA addition against Augumentation work				
Sr. No.	**Voltage Level**	**Name of substation**	**MVA**	
36	132kV	132kV Sanaswadi	50	
37	132kV	132kV Sanaswadi	50	
38	132kV	132 kV Indapur	25	
39	132kV	132kV Purandwade	25	
40	132kV	132kV Phaltan	50	
41	132kV	132kV Shirwal	25	
42	220kV	220kV Tilawani	100	
43	132kV	110kV Ratnagiri	25	
44	132kV	132kV Khapri	25	
45	132kV	132kV Morgaon-Arjuni	25	
46	132kV	132kV Ghosekhurd	25	
47	110kV	110kV Neral	25	
48	100kV	100kV Ambernath	50	
49	100kV	100kV Nocil	50	←
		Total	**3245**	
FY 2024-25				
MVA addition against new substations				
Sr. No.	**Voltage Level**	**Name of substation**	**MVA**	
1	400 kV	400/220 KV Hinjewadi SS	1000	
2	220 kV	220/33 kV Shendra GIS	100	
3	220 kV	220/132/33 KV Pardi SS	300	
4	220 kV	220/22 kV Abitghar GIS	100	
5	220 kV	220/22 kV Mankoli GIS	100	

MVA addition against Augumentation work				
Sr. No.	**Voltage Level**	**Name of substation**	**MVA**	
6	220 kV	220/132/33 kV Mankapur SS	300	
7	132 kV	132/66/33 KV SICOM SS	100	
8	132 kV	132 kV Sironcha SS	50	
9	132 kV	132/33 kV Jat Tarodi SS	100	
10	132 kV	132/33 kV Dhanora SS	50	
11	132 kV	132kV Bibvewadi SS	50	
		Total	**2250**	
MVA addition against Augumentation work				
Sr. No.	**Voltage Level**	**Name of substation**	**MVA**	
1	400kV	400kV Talandge	500	
2	400kV	400 kV Lamboti	500	
3	400kV	400kV Kumbhargaon	500	
4	220kV	220kV Telco	100	
5	220kV	220KV Kaulewada	50	
6	220kV	100kV Vasai	50	
7	220kV	220KV Alephata	100	
8	220kV	220KV Lonikand	100	
9	220kV	220KV Chakan-II	100	
10	220kV	220kV Halkarni	50	
11	220kV	220kV Tuljapur	100	
12	220kV	220kV Bhokar	50	
13	220kV	220kV Dasturi	25	
14	220kV	220kV Khaparkheda	25	
15	220kV	220kV Babhaleshwar	100	

MVA addition against Augumentation work				
Sr. No.	**Voltage Level**	**Name of substation**	**MVA**	
16	220kV	220kV Ranjangaon	50	
17	220kV	220kV Airoli Knowledge Park	50	←
18	220kV	220kV Sonkhar	50	←
19	220kV	220kV Nerul	100	←
20	132kV	132kV Jalna MIDC	50	
21	132kV	132kV Gondia	50	
22	132kV	132KV Hingna-I	50	
23	132kV	132KV Hingna-II	50	
24	132kV	110kV Kale	25	
25	132kV	132kV Ambad	50	
26	132kV	132kV Buldhana	25	
27	132kV	132kV Karanja	25	
28	132kV	132kV Dusarbid	25	
29	132kV	132kV Pandharkawada	50	
30	132kV	132 kV Degloor	25	
31	132kV	132 kV Kallamb	25	
32	132kV	132 kV Georai	50	
33	132kV	132 kV Kinwat	25	
34	132kV	132 kV Himayatnagar	25	
35	132kV	132 kV Mukhed	50	
36	132kV	132kV Bharshinghi	50	
37	132kV	132kV Palghar	50	
38	110kV	110kV Kavathe M'kal	50	

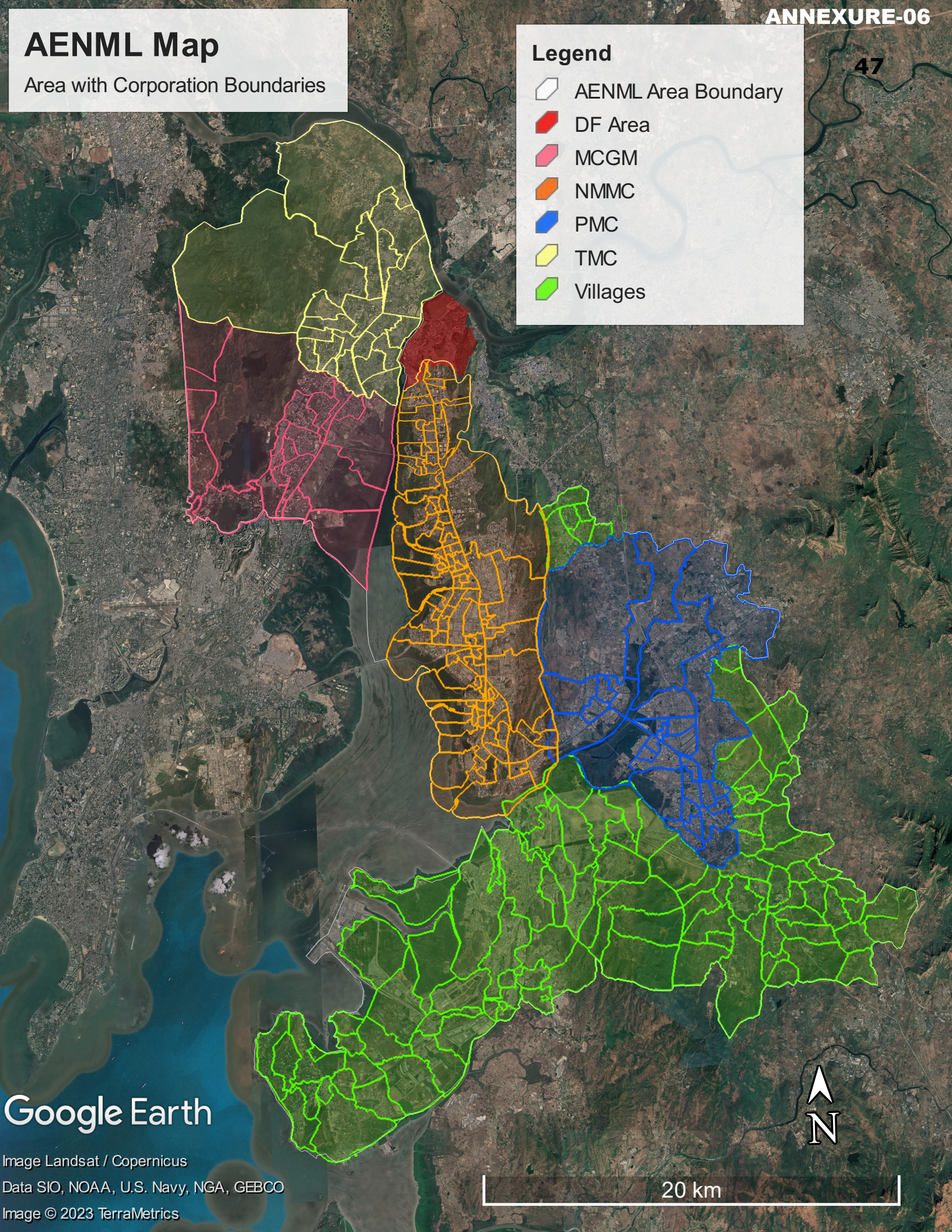
MVA addition against Augumentation work				
Sr. No.	Voltage Level	Name of substation	MVA	
		Total	3350	

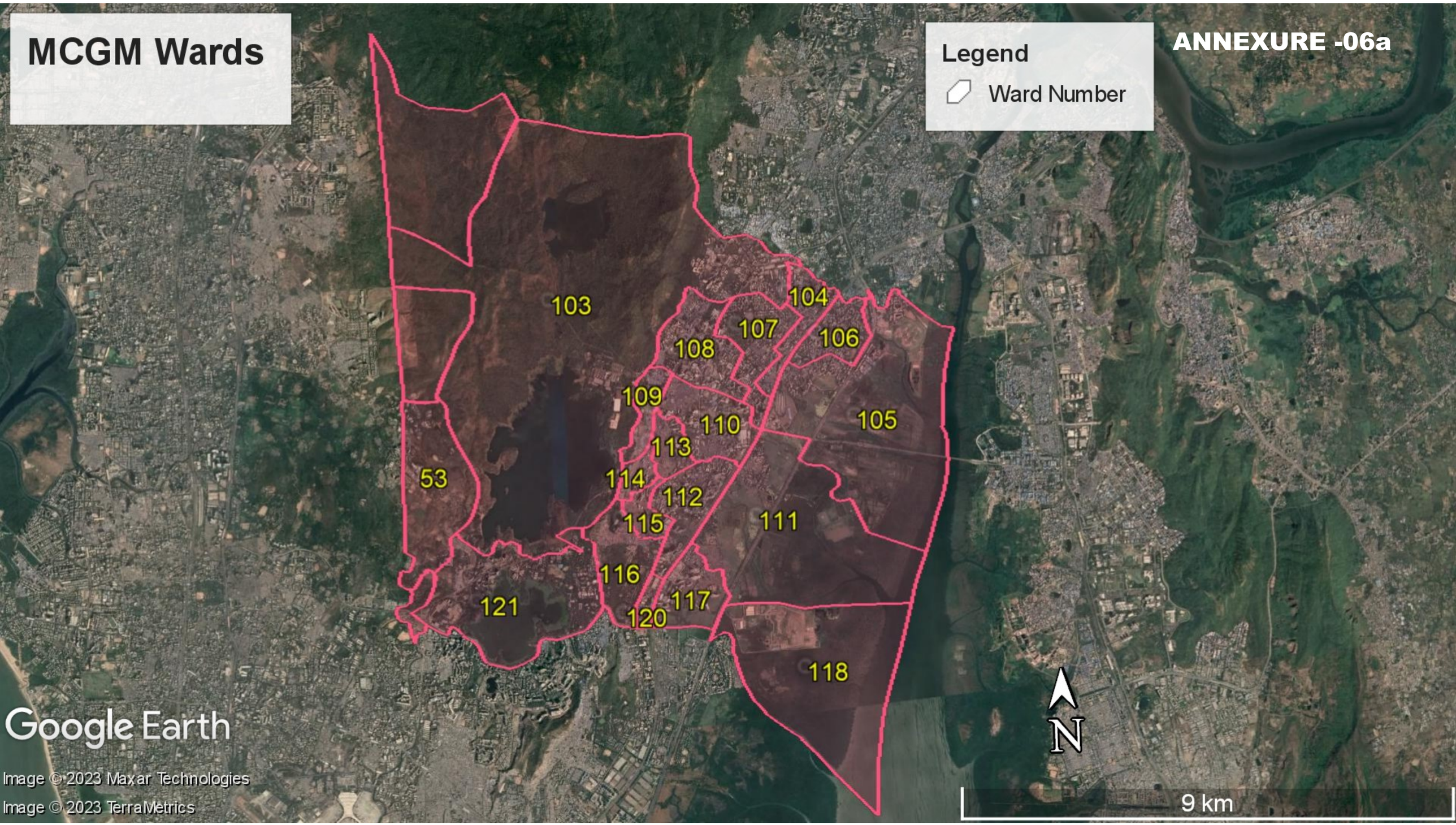
Extracts from MSETCL MTR Petition FY2021-FY25 Case 232 of 2022, File name "8. BAYS LIST FINAL – for Certificate

Description	Voltage Rating	SS NAME	BAY TYPE	INSULATING MEDIUM	BAY UTILIZATION STAT
22 KV SPARE FEEDER	22 KV	100 KV NOCIL S/S	FEEDER BAY	AIR INSULATED - OUTDOOR	SPARE BAY
22 KV GIS FEEDER 11	22 KV	220 KV MULUND S/S	FEEDER BAY	GAS INSULATED - INDOOR	SPARE BAY
22 KV GIS FEEDER 12	22 KV	220 KV MULUND S/S	FEEDER BAY	GAS INSULATED - INDOOR	SPARE BAY
22 KV GIS FEEDER 4	22 KV	220 KV MULUND S/S	FEEDER BAY	GAS INSULATED - INDOOR	SPARE BAY
22 KV GIS FEEDER 5	22 KV	220 KV MULUND S/S	FEEDER BAY	GAS INSULATED - INDOOR	SPARE BAY
22 KV GIS FEEDER 6	22 KV	220 KV MULUND S/S	FEEDER BAY	GAS INSULATED - INDOOR	SPARE BAY
22 KV SPARE FEEDER	22 KV	220 KV MULUND S/S	FEEDER BAY	AIR INSULATED - OUTDOOR	SPARE BAY
22 KV SPARE BAY 3	22 KV	220 KV NERUL S/S	FEEDER BAY	AIR INSULATED - OUTDOOR	SPARE BAY
22 KV SPARE FEEDER 1	22 KV	220 KV MAHAPE S/S	FEEDER BAY	AIR INSULATED - INDOOR	SPARE BAY
22 KV SPARE FEEDER 2	22 KV	220 KV MAHAPE S/S	FEEDER BAY	AIR INSULATED - INDOOR	SPARE BAY
22 KV SPARE BAY 1	22 KV	220 KV URAN S/S	FEEDER BAY	AIR INSULATED - OUTDOOR	SPARE BAY
22 KV GIS SPARE FEEDER 1	22 KV	220 KV TALOJA S/S	FEEDER BAY	GAS INSULATED - INDOOR	SPARE BAY
22 KV GIS SPARE FEEDER 2	22 KV	220 KV TALOJA S/S	FEEDER BAY	GAS INSULATED - INDOOR	SPARE BAY
22 KV GIS SPARE FEEDER 3	22 KV	220 KV TALOJA S/S	FEEDER BAY	GAS INSULATED - INDOOR	SPARE BAY
22 KV SPARE	22 KV	220 KV ONGC PANVEL S/S	FEEDER BAY	AIR INSULATED - OUTDOOR	SPARE BAY
33 KV SPARE BAY 1 GIS	33 KV	220 KV ONGC PANVEL S/S	FEEDER BAY	GAS INSULATED - INDOOR	SPARE BAY
33 KV SPARE BAY 2 GIS	33 KV	220 KV ONGC PANVEL S/S	FEEDER BAY	GAS INSULATED - INDOOR	SPARE BAY
33 KV GIS SPARE BAY 1	33 KV	400 KV KHARGHAR S/S	FEEDER BAY	GAS INSULATED - INDOOR	SPARE BAY
33 KV GIS SPARE BAY 2	33 KV	400 KV KHARGHAR S/S	FEEDER BAY	GAS INSULATED - INDOOR	SPARE BAY

AENML Map

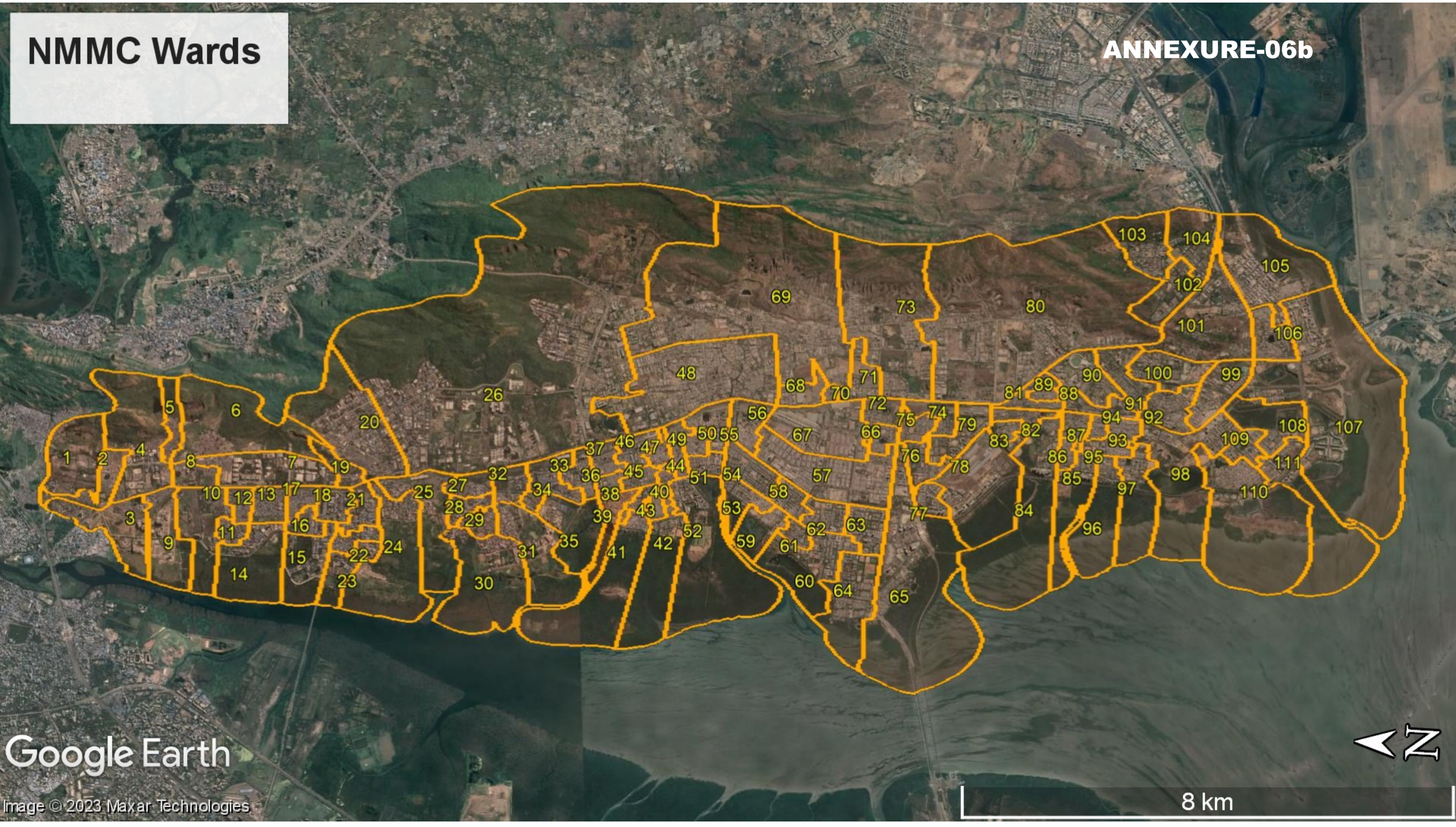
Area with Corporation Boundaries




MCGM Wards
Legend
Ward Number
ANNEXURE -06a
103
104
107
106
108
109
110
105
113
53
114
112
115
111
116
121
117
120
118
N
Google Earth
Image © 2023 Maxar Technologies
Image © 2023 TerraMetrics
9 km

NMMC Wards

ANNEXURE-06b

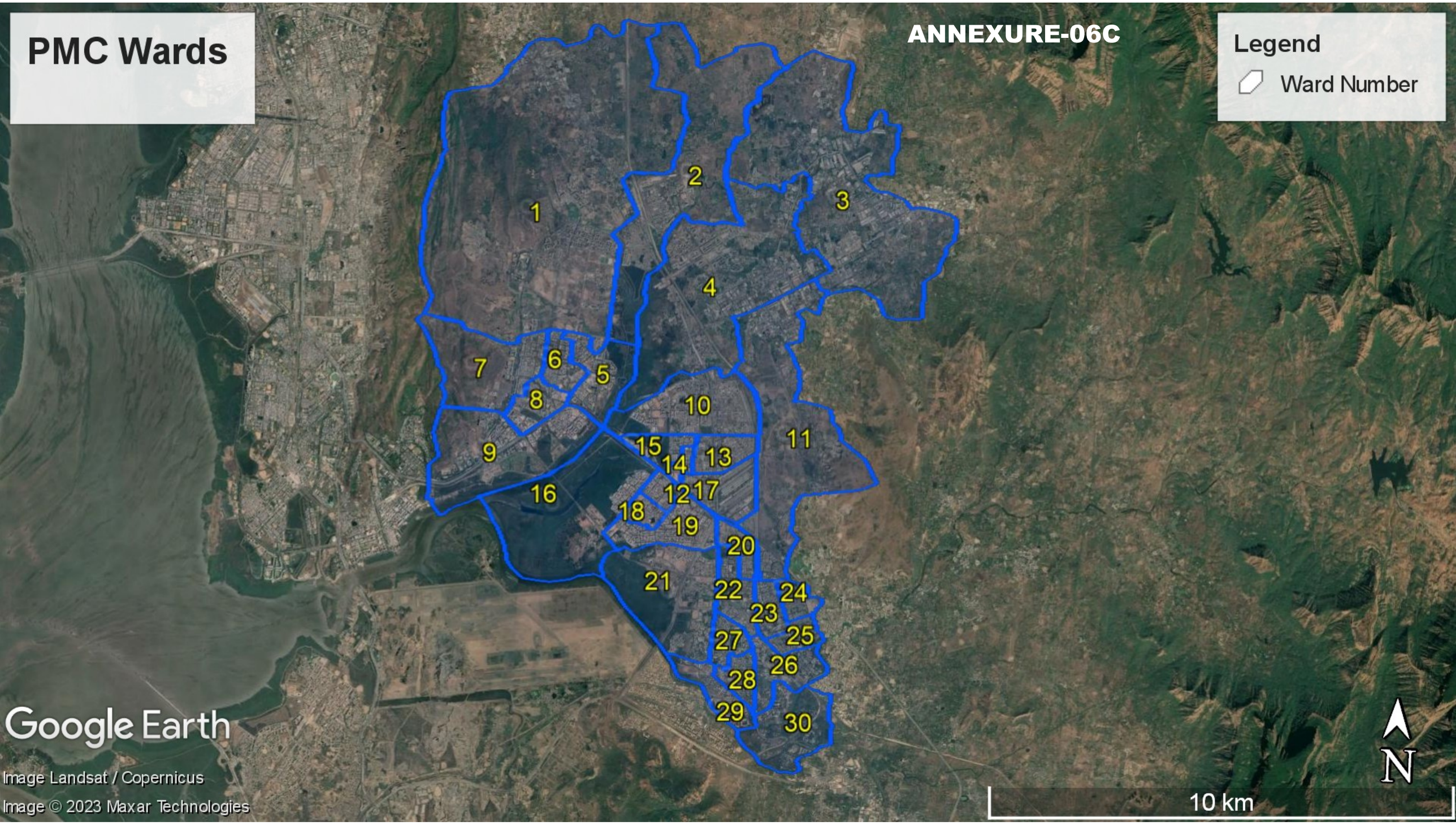


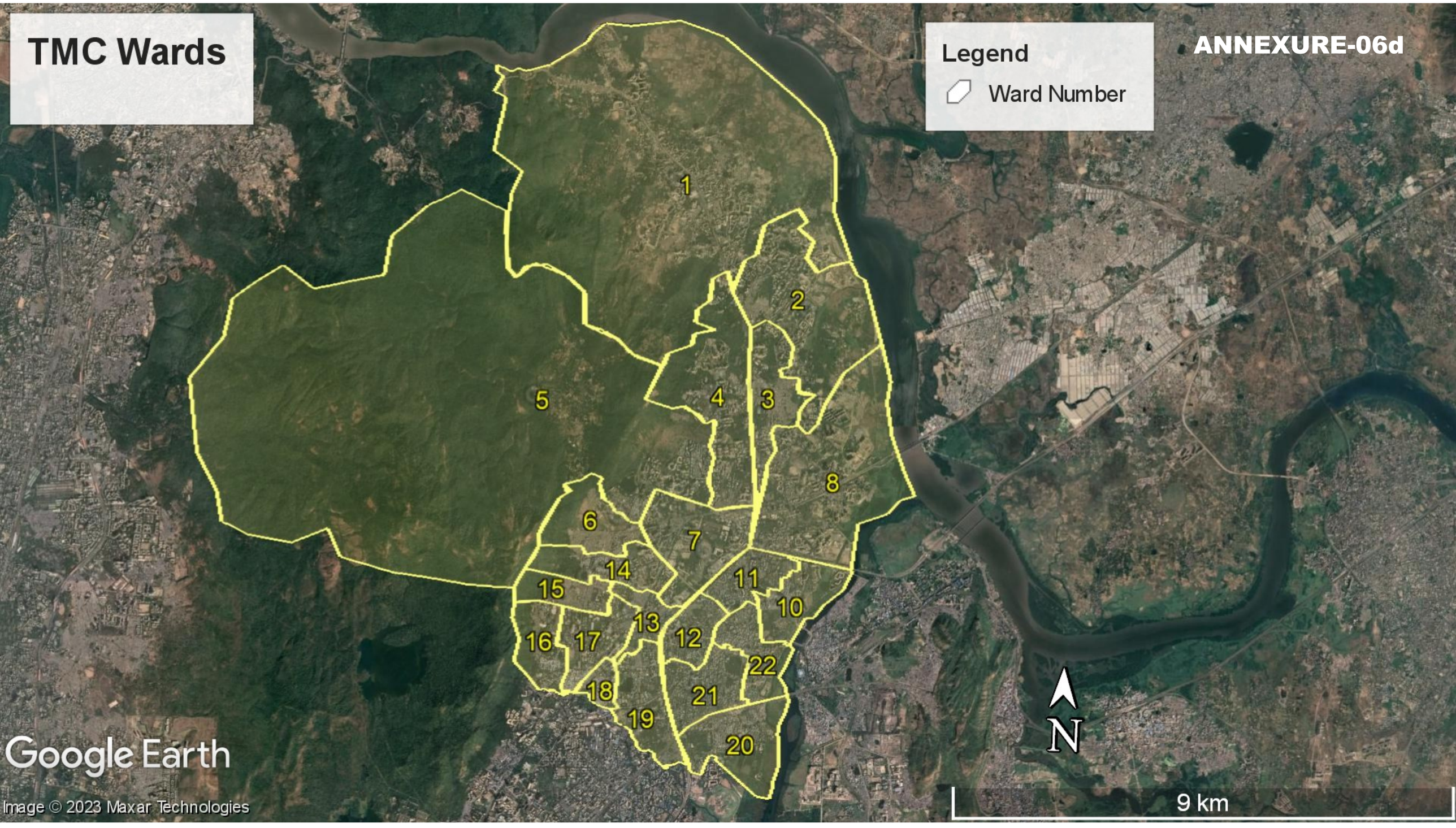
PMC Wards

ANNEXURE-06C

Legend

Ward Number




TMC Wards
Legend
Ward Number
ANNEXURE-06d
1
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22
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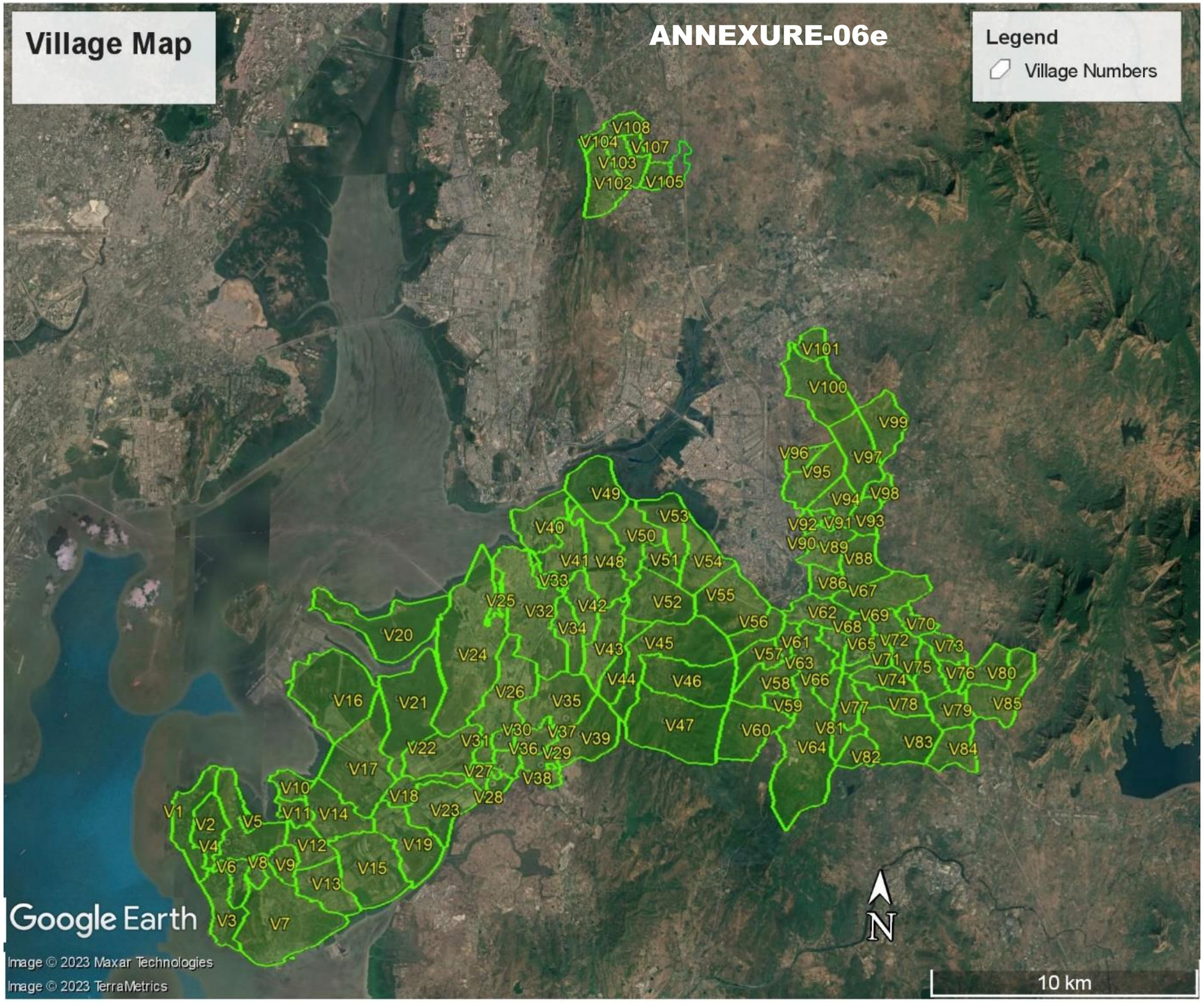
9 km
Google Earth
Image © 2023 Maxar Technologies


Village Map
ANNEXURE-06e
Legend
Village Numbers
V108
V104
V107
V103
V102
V105
V101
V100
V99
V96
V97
V95
V94
V98
V92
V91
V93
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V14
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V12
V19
V6
V8
V9
V15
V13
V3
V7
Google Earth
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N
10 km