

**MANAGING COMMITTEE  
2023-2025**

**PRESIDENT**  
Domnic Romell

**IMMEDIATE PAST PRESIDENT**  
Boman Irani

**PRESIDENT-ELECT**  
Ajay Ashar

**STRATEGIC ADVISOR**  
Abhishek Lodha

**SENIOR VICE PRESIDENTS**

Parag Shah  
Jayesh Shah  
Sukhranj Nahar  
Sandeep Raheja  
Rasesh Kanakia

**VICE PRESIDENTS**

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Shailesh Puranik  
Pritam Chivukula  
Amit Thacker  
Jackbastian Nazareth

**SECRETARY**  
Dhaval Ajmera

**TREASURER**  
Nikunj Sanghavi

**JOINT SECRETARIES**

Tejas Vyas  
Pratik Patel  
Sunny Bijlani  
Rushi Mehta

**JOINT TREASURER**  
Gurminder Singh Seera

**COMMITTEE MEMBERS**

Shahid Balwa  
Subodh Runwal  
Parag Munot  
Nainesh Shah  
Mukesh Patel  
Munish Doshi  
Raajesh Prajapati  
Shailesh Sanghvi  
Parth Mehta  
Harmohan Sahni  
Jayvardhan Goenka  
Umang Kuwadia  
Prashant Khandelwal  
Binitha Dalal  
Ayushi Ashar  
Samyag Shah  
Ricardo Romell

**SPECIAL ADVISORS**

Ar. Hafeez Contractor  
Adv. Parimal Shroff  
Anuj Puri

**STATISTICS AND RESEARCH**

Dr. Adv. Harshul Savla

**INVITEE MEMBERS**

Rahul Sagar  
Ramkrishna Raheja  
Nishant Agarwal  
Harsh Hiranandani  
Ajay Nahar  
Azim F. Tapia  
Cherag Ramakrishnan  
Vijay Lakhani  
Jayesh Chauhan  
Aditya Shah  
Shraddha Goradia  
Sudhanshu Agarwal  
Hussain Lalani  
Sahil Parikh  
Aditya Mirchandani  
Rushi Ajmera

**YOUTHWING CONVENOR**  
Naman Shah

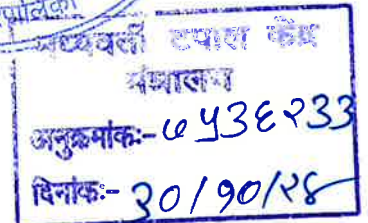
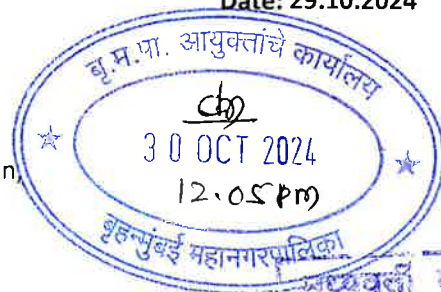
**PROCUREMENT CONVENOR**  
Nimish Ajmera

**WOMEN'S WING CHAIRPERSON**  
Jesal Shah

**CREDAI - MCHI**

Ref. No. MCHI/PRES/24-25/140

Date: 29.10.2024



To,

1. **Dr. Bhushan Gagrani (I.A.S.),**  
Municipal Commissioner,  
Brihanmumbai Municipal Corporation,  
Fort, Mumbai - 400 0001.

2. **Smt. Abha Shukla (I.A.S.),**  
Additional Chief Secretary Energy,  
Industries, Energy & Labour Dept.,  
3rd Floor, Main Bldg., Mantralaya,  
Mumbai - 400032.

**Sub:** Installation of IOT in the residential buildings as per BMC Fire department circular no 66 dated 14.10.2022 based on Government of Maharashtra GR no 2021/114/Urja 5 Dated 27.08.2021. --- Monopoly of one vendor.

**Ref:** 1) Mumbai Fire Brigade circular no 12 dated 07.06.2024  
2) The Chief Electrical Inspector PWD Advisory for IOT vide letter no CEI/Tech/36/2024 Dated 24.09.2024

Respected Sir & Ma'am,

Considering the incidences of fire in the COVID period in the Government hospitals, private hospitals & public places, installation of the "IOT" was made mandatory in the electric meter room of Government hospitals, private hospitals & public places buildings. The said GR is enclosed herewith. Referring to clause non 8 in the GR, 8 nos of protection & monitoring systems were stated & for the same purpose a microprocessor based IOT (Internet of Things) instrument was recommended to be installed at all the Government hospitals, private hospitals & public places buildings.

In continuation with this, the fire department BMC Mumbai vide their circular no 66 dated 14.10.2022 has made it compulsory for all the high rise residential buildings, commercial buildings also in addition to the Government hospitals, private hospitals & public places buildings. Later as per circular under reference 1 by fire brigade, the provision of IOT for residential buildings was provided with option of installation of smart meters by utility provided the smart meters have all features of IOT. The Chief Electrical Inspector PWD vide his circular under reference 2 has made it mandatory to check the required provision of IOT at the drawing approval stage & compliance of the same before charging permission by Electrical Inspectors.

The smart meters provided by utilities like Tata Power, Adani Electricity comply for 12 nos. out of 14 nos of features of IOT. The according letter is enclosed herewith. The feature 1) Earth leakage protection for three phase & 2) Detection of load with high inrush are not available in the smart meters. The CFO is rejecting the smart meters as the features at place 4 (Earth leakage protection) & place 13 (detection of load with high inrush) are not matched by Tata Power and nor by Adani Electricity. **So, IOT becomes compulsory for residential buildings also.**

Presently the only certified vendor for supply of IOT is "Jhaveri Power labs". No other manufacturer or supplier is available in the market. In this regard, we want to submit our below observations & difficulties for implementation of the "IOT" in residential buildings, commercial buildings.

**Maharashtra Chamber of Housing Industry**

Maker Bhavan II, 4<sup>th</sup> Floor, 18, V. Thackersey Marg, New Marine Lines, Mumbai - 400 020.  
Tel: 42121421, Fax: 4212 1411/407 Email: secretariat@mchi.net Website: [www.mchi.net](http://www.mchi.net)

CREDAI-MCHI CHAPTERS : THANE | KALYAN-DOMBIVLI | MIRA BHAYANDAR | RAIGAD | NAVI MUMBAI |  
BHIWANDI | PALGHAR BOISAR | SHAHAPUR-MURBAD | URAN-DRONAGIRI |  
VASAI VIRAR | ALIBAG | KARJAT-KHALAPUR-KHOPOLI | YOUTH NMR

- 1) Presently only one vendor named "**Jhaveri Power labs**" is certified to manufacture the unit "IOT". In last four years nobody else is yet certified. The total construction industry is presently at the mercy of "**Jhaveri Power Labs**" for supply, rates of the unit. The vendor detects his terms & conditions of supply of material & is unable to supply to all in scheduled time. The unit provided by this vendor is not full proof. This unit has a cloud based data collection. The command center control & monitoring in this unit lies with the vendor & not to any government body. The CFO do not have any system to access to the data which is available with vendor. The unit IOT is not providing any additional information than the present practice of installation of BMS in the buildings. The place of installation, design, capacity of the unit "IOT" is being governed by the vendor presently & no government body has a control over him. His certificate is required as "completion certificate" & needs to be submitted to EI PWD & CFO.
- 2) This unit is not available for the electric installations where the electric load is more than 200 Amps. The vendor is denying to provide the same. The common area load above 200 Amp is very common in the buildings. The vendor is insisting to install multiple units at the load ends which is not practical. There is no solution provided by EI PWD on this & such matters are pending from long time.
- 3) The IOT requires Wifi network in the meter room & common areas. The society or the flat owner will have to maintain the healthy Wifi network in the building & without this the unit does not work. How to ensure the healthy Wifi everywhere in the building is a big concern.
- 4) The IOT provided by the vendor "Jhaveri Power labs" is not a fire detection or protection system. It is an electrical circuit monitoring system with disconnection provision. The vendor do not take any responsibility of any fire protection after installation of this unit. The installations in the electric meter rooms up to meters is responsibility of power supply utilities like Msedcl, Tata Power, and BEST etc. The smart meters under installation by them covers maximum features of the IOT. It is not accepted by the vendor.
- 5) The present firefighting equipment which are mandatorily installed by the developers, builders as per the norms of fire protection systems like fire alarm system, sprinklers etc. provides protection from fire. The BMS provision in the buildings provides every data required in all terms. The IOT manufacturer is not providing any additional feature over this. How the total system can be handed over to one vendor in terms of data collection & storage is a big concern. There is no control over this vendor by any government authority on the data stored & its access. It is requested to check the actual utility of this imposed unit. The compulsory installation of this unit should be stopped until the above facts are cleared & multiple vendors are available in the market.

Thanking you,

Yours sincerely,  
**For CREDAI-MCHI**



**Domnic Romell**  
President



**Dhaval Ajmera**  
Hon. Secretary

**CC for information & necessary action:**  
**The Chief Engineer (Electrical),**  
Public Works Department,  
3<sup>rd</sup> Floor, Bandhkam Bhavan,  
Marzban Road, Fort, Mumbai-1.

30/09/2028  
अधीक्षक विकास (विद्युत)  
उप-अधीक्षक विकास  
तथा सहायक अधीक्षक  
मुख्य प्रबंधक (विद्युत) मंडल  
रा. प्र. विभाग, मुंबई



बृहन्मुंबई महानगरपालिका

मुंबई अग्निशमन दल

प्रमुख अग्निशमन अधिकारी यांचे कार्यालय,

भायखळा समादेश केंद्र इमारत,

१ ला मजला, बापूराव जगताप मार्ग,

भायखळा, मुंबई - ४०० ००८.

दूरध्वनी : ०२२-२३०० १३९३/९४/९५

फॅक्स : ०२२-२३०० १३९२

ईमेल : cfo.mfb@mcgm.gov.in

क्रमांक : F13/H/242

दिनांक : 31/05/2024

To,

Shri Manojkumar Dubal

President of PEATA

Unit No. A-103, 1st floor,

New Udyog Mandir No.2,

Behind Johnoson & Johnson,

7-C, Mogul Lane, Mahim (W),

Mumbai - 400016.

विषय: Minutes of Meeting on PEATA / MCHI Representation.

उपरोक्त विषयासंदर्भात उप आयुक्त (वित्त) यांच्या दालनात दिनांक 12.04.2024 रोजी 1500 वाजता प्रमुख अभियंता (मालमत्ता), प्रमुख अग्निशमन अधिकारी, PEATA & MCHI यांचे प्रतिनिधी यांच्या समवेत बैठक आयोजित करण्यात आली होती. सदर बैठकीमध्ये झालेल्या चर्चेचे इतिवृत्त आपल्या माहितीकरीता सोबत जोडण्यात आले आहे.

सविनय सादर.

(सं.दा.सावंत)

प्रमुख अग्निशमन अधिकारी(प्र)

**SUB: MINUTES OF MEETING ON PEATA / MCHI REPRESENTATION**

In order to streamline the procedure in issuance of CFONOC and other related issues in respect thereof series of meetings, were held from October 2023 to Jan 2024 in the chamber of Jt. MC (Improvement) when CHE(DP), CFO,EE (MCO), PEATA & MCHI representative were present. The various issues were deliberated at length & Pointwise decision taken in the meeting is as below:

	Issue Raised	Discussion	Action
<b>A</b>	<b>Issue discussed with respect Format of CFO NOC</b>		
1	Title of CFO NOC /clearance	NOC from Fire Department to be titled as "Provisional Fire Safety Approval / Clearance" as per DCPR provisions by discontinuing the issuance of NOC as present practice of "Fire Protection Measures & Firefighting Safety requirement".	Agreed
2	Issuance of NOC in the name of Developer / Owner/ Project Proponent/applicant	"Provisional Fire Safety Approval / Clearance" is required to be issued in the Name of Developer / Owner/ Project Proponent as the applicant is the developer / owner/ Project Proponent and CC thereof to LS/ Architect, inline with issuance of IOD, CC & OCC which are issued in the name of the developer / owner/ project proponent.	Agreed
3	Issuance of Plans with respect to CFO completion certificate	While issuing NOC for BCC/OCC, plans shall be issued. In all other NOC's completion certificate with Completion plans are being issued.	Agreed, subject to joint inspection by CFO & BP Department on issuance of CFO "Final Fire Safety Approval / Clearance" for completion / OCC along with completion plans, B.P.Dept will sign at the time of issuance of OCC/BCC by B.P.Department Plans. Thus, same plans will be signed by both departments separately in the console
4	Earlier issued NOC by CFO in the past to be	The NOC's which are issued earlier by CFO needs to be	Agreed(Case to Case)

	honored	honoured and amendments to the same shall be allowed without comments on earlier issued NOC by CFO Dept.	
<b>B Fire Lift</b>			
5	Glass Vision Panel in Fireman Evacuation Lift	Fireman Evacuation Lift car doors and landing doors shall have two hours fire resistance and shall have provision of glass vision for both doors of minimum 1 ft. X 2 ft. and the Glass shall also have two hours Fire resistance	B.R.C No. 52 dated 13/11/2023 to be followed
<b>C Basement Ventilation and Nos. of Basement</b>			
6	Basement Ventilation	Ventilation to the basement can be Either Mechanical Or Natural as per NBC/ DCPR	Agreedwith certification from MEPF consultant / Fire Safety Consultant as per DCPR
7	Basement Compartmentalization	Compartmentation (Area & Type) in basements shall be as per DCPR / NBC	Agreed
8	Number of Basements	Number of Basements are not regulated in DCPR 2034  There is no restriction on the number of basements as per DCPR 2034.  DCPR only stipulates that 1.5m open space shall be provided for 8.4m depth of basement & for every additional depth additional 1.5m shall be provided.	Agreed
<b>D Glass Façade</b>			
9	Design & Provision of Glass Façade	Glass facade details shall be as per DCPR /NBC .	Agreedwith certification from MEPF consultant / Fire Safety Consultant as per NBC 2016 part 4 , clause 3.4.10.2.a in consonance with DCPR except existing glass facade buildings.
10	Provision of Sprinkler	Provision of Sprinkler at certain distance from Glass façade shall be allowed as per NBC.	Agreed
11	Provision of Drencher	Provision of drencher system is being insisted with-out giving reference to any of the code provision / NBC provision.	End of the Sprinkler arrays to be designed in a way to provide the complete linear coverage of the façade, distance between last

			array of the sprinkler and façade should not be more than 600 mm centre to centre Distance for such sprinklers should not be less than 3.5 m (Sketch enclosed)
<b>E Fire Tower &amp; External Fire Evacuation System</b>			
12	Provision of Fire Tower & External Fire Evacuation System as Reg. 48 (9)(B) of DCPR 2034	<p>As per DCPR Regulation 48 (9) (B) two type of systems any one of which provided shall be Agreed.</p> <p>Provision of Regulation reads as below:</p> <p><i>"For High Rise Building having height more than 70m shall be provided with <u>Fire tower</u> at Landing / Mid-landing Level with Smoke Check Lobby with Firemen's Lift being integral part of the Fire Escape Staircase <u>or</u> <u>Fire Evacuation Lift</u> (Hydropneumatics' / electrically operated) on external face of the building having opening within the fire escape staircase at landing / mid-landing level with smoke check lobby as approved by CFO shall be provided.</i></p> <p><u>Fire Tower</u> if proposed shall be as per General arrangement of Fire Tower as per NBC and/or as per report of the expert Committee regarding Special Safety Regulations formulated by High Court in respect of Man made disasters.</p> <p><u>Fire Evacuation lift</u> if proposed shall be as per General arrangement and shall be as per sketches approved by CFO</p>	<p>Agreed as per sketch enclosed.</p> <p>Fire Evacuation lift of min. load capacity of 1000 kg (for fresh proposals) if proposed shall be generally as per General arrangement and it shall be as per sketches enclosed so that double redundancy for the fire evacuation lift is achieved.</p>
<b>F Gate &amp; Compound Wall</b>			
13	Width of Compound Wall Gate	Width of GATE shall be as per DCPR / NBC.	<p>Agreed.</p> <p>Width of gate shall be as per DCPR / NBC.</p>

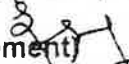
			Width of gate is to be decided based on site conditions / access Road width
14	Compound wall along Front Open Spaces	For safety of building compound wall is basic requirement but CFO is insisting Not to construct compound wall on roadside there is no such provision in DCPR / NBC, earlier same was being allowed.	To be decided on case to case basis as per site conditions and road width etc.
15	Condition in CFO NOC level of plot to keep same as abutting road	The condition is incorporated in CFO NOC that the road and plot should be at same level. However, on the road there are footpaths with covered open drains touching compound wall which are at higher level than the road. Hence, ground level within plot must be adjusted accordingly hence this condition needs modification.	To be decided case to case basis, as per site conditions.
<b>G Size of Water Tank and Fire Pumps</b>			
16	Size of Underground Water Tanks and Overhead Water Tanks	Size of underground and Overhead water tank shall be as per the relevant provision of DCPR / NBC.	Agreed  Min. Capacity of Overhead Fire Tank will be insisted per Wing and notes per number of staircases.  For Fire tanks capacity Requirements calculations (as per relevant NBC / IS Code) from MEP consultant & report for the same will be insisted
17	Requirements of sizes and numbers of Fire Pumps	Sizes and number of Fire pump shall be as per provisions of NBC / DCPR.	Agreed (as per relevant NBC / IS Code, as NBC always refers IS standards)
<b>H Refuge Area Location</b>			
18	Location of Refuge Floor		
19	Location of Refuge Floor on Terrace	If last floor of building has part terrace and it becomes 7 <sup>th</sup> habitable floor, then as per	Agreed  All the requirements for the refuge area

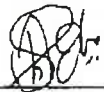
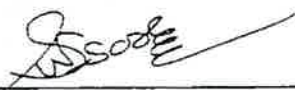
		<p>regulations part terrace shall be treated as refuge area and it shall be on side accessible by Fire Engine.</p> <p>Despite this being well within the provisions of DCPR the same is not allowed without any specific reason or provision.</p>	<p>stipulated in DCPR-2034 shall be fulfilled</p> <p>No opening shall be permitted from the adjoining habitable / non-habitable area.</p>
<b>I General Planning Points</b>			
20	Internet of Things (IoT)	<p>IoT is insisted to be implemented in Residential Buildings without reference to any code.</p> <p>As per code implementation of IoT Technology is required to be provided in Non Residential Buildings</p>	<p>IF SMART METER with provision of the parameters included in the IOT devices is provided by electricity power supplier then this need not be insisted.</p>
21	Busbar		To be insisted for building above 70mtrs.
22	Construction Materials used shall be as per Indian Standard Codes (IS Codes)	Type of material to be used RCC or Steel both are permitted in Indian Standard Codes (IS Codes) same shall be respected, it can be used for any structure as per Indian standard Code and its Fire resistance.	Agreed
23	Escalator	Condition of escalator shall be as per NBC Section 5 provided for escalator & horizontal transportation. At present detailed condition is incorporated without any reference to NBC OR Indian code.	Agreed
24	Location & Provision of Fire-Resistant Door (FRD)	Location of FRD shall be as per DCPR/ NBC. Practice of Insisting FRD to the Kitchen to be discontinued.	Agreed
25	Travel Distance to nearest Exit	Travel Distance to nearest Exist shall be as per DCPR provisions	Agreed Sketch is annexed herewith
26	Artificial Ventilation Shaft	DCPR permits Artificial Ventilation shaft, hence it shall be allowed.	Agreed Subject to staircase and common lobby separately ventilated / pressurised

27	Width of Ventilation Window in Lobby	Width of Ventilation window shall not be a criterion it shall be based on Minimum 1 sqm area per landing & 2.5% of Lobby area. This can be achieved by providing more height with lesser width.	Agreed Minimum 1.00 m wide to be insisted
28	<p>The conditions of earlier CFO NOC stands modified as per above .</p> <p>The entire committee is of the opinion that the "Consultant for Fire Safety Measures" as per DCPR-2034 to be empanelled by CFO department.</p> <p>As per regulation 2 (iii) of DCPR 2034 <b><i>Terms and expressions neither defined in these Regulations nor defined in (I) and (II) above shall be interpreted with reference to the latest National Building Code in the relevant context.</i></b></p> <p>Additional safety requirements insisted, if any shall be based on Fire Act, NBC, Indian Standard Codes and NFPA amended from time to time.</p> <p>Additional conditions or requirements except exceptional cases beyond what is stated above should not be incorporated in CFO NOC.</p>		

  
CH.E.(DP).

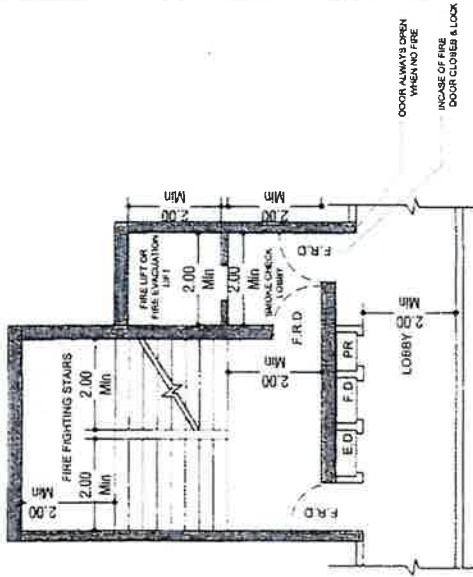
  
CFO.

Above changes ~~will~~ <sup>shall</sup> be implemented if and only if these are approved by Amc (Es),  
Hon. mc  
JT.M.C. (Improvement) 

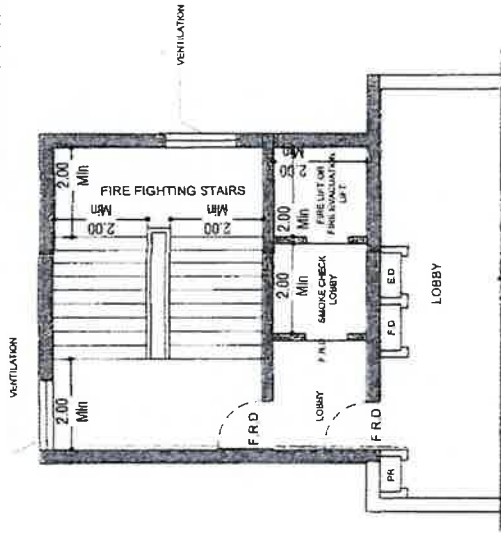
MCHI REPRESENTATIVE	PEATA REPRESENTATIVE
	
	1. SHASHIKANT JADHAV (VICE PRESIDENT)
	
	2. SANDIP ISORE (VICE PRESIDENT)

FIRE TOWER SKETCH - FOR BUILDING HEIGHT ABOVE 70MT

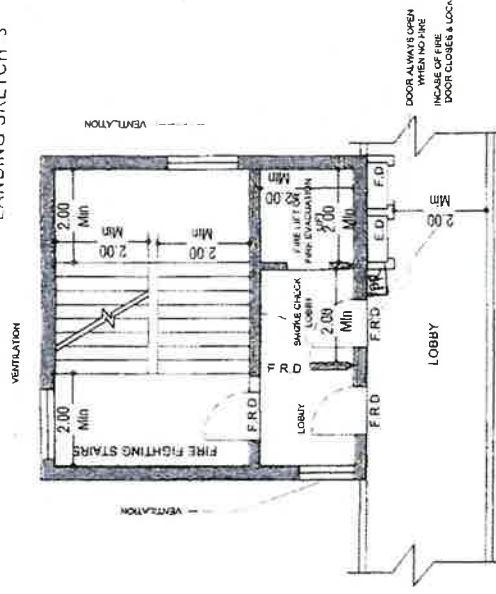
LANDING SKETCH - 1



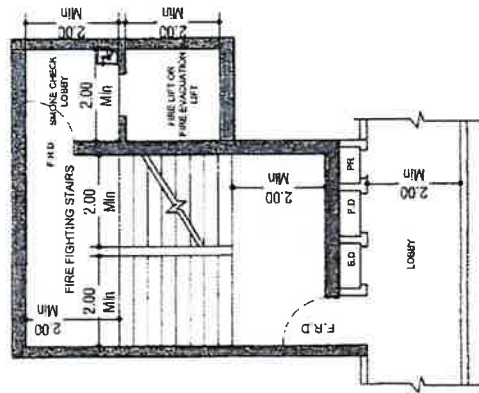
LANDING SKETCH - 2



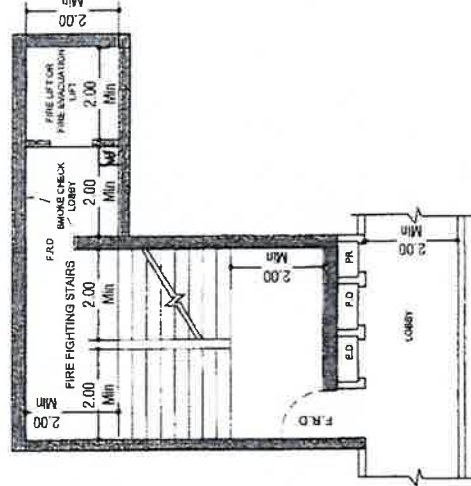
LANDING SKETCH - 3



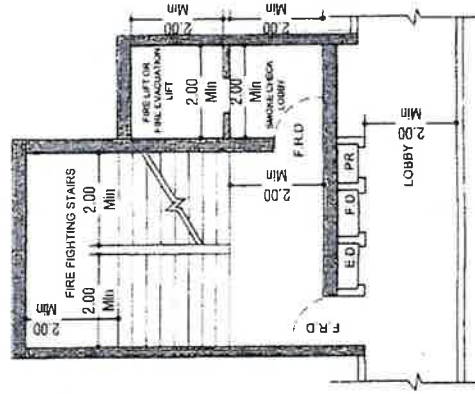
MID-LANDING SKETCH - 1



MID-LANDING SKETCH - 2



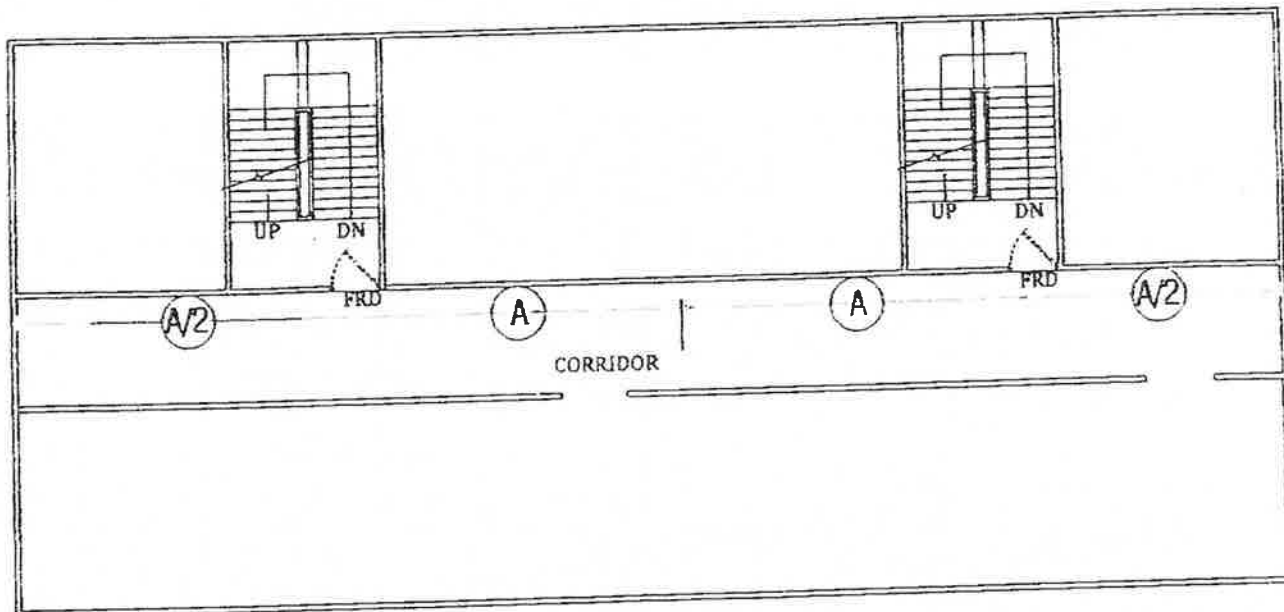
LANDING SKETCH - 4




- NOTE: 1) STORE ROOM / SERVANT ROOM OPENING IS NOT ALLOWED IN STAIRCASE.  
2) LAYOUT TO BE PLANNED AS PER PROJECT BASIS MEETING ABOVE REQUIREMENTS.  
3) SMOKE CHECK LOBBY CAN BE VENTILATED OR PRESSURIZED.  
4) SMOKE CHECK LOBBY - SHALL BE 75MM ABOVE MAIN LOBBY.


*Handwritten signatures and stamps:*  
Chief Engineer  
Development plan  
Date: 11/11/2021  
By: [Signature]


## TRAVEL DISTANCES FROM EXITS/ STAIRCASES



Occupancy	Travel Distance without sprinkler	Travel Distance with sprinkler
	A	A
Residential / Educational/ Institutional	22.5 M	30 M
Assembly, starred category hotels business, mercantile, industrial, hazardous occupancies and storage buildings	30 M	45 M

  
 PEATA

  
 Chief Engineer  
 Development Plan

  
 Chief Engineer  
 Mumbai Fire Brigade

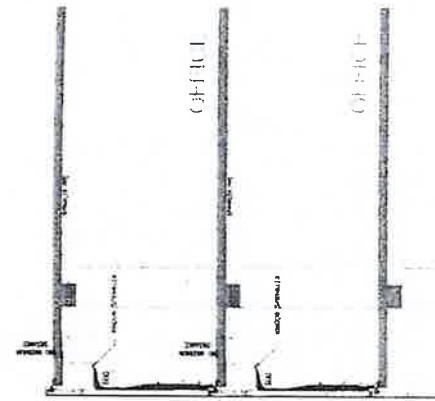
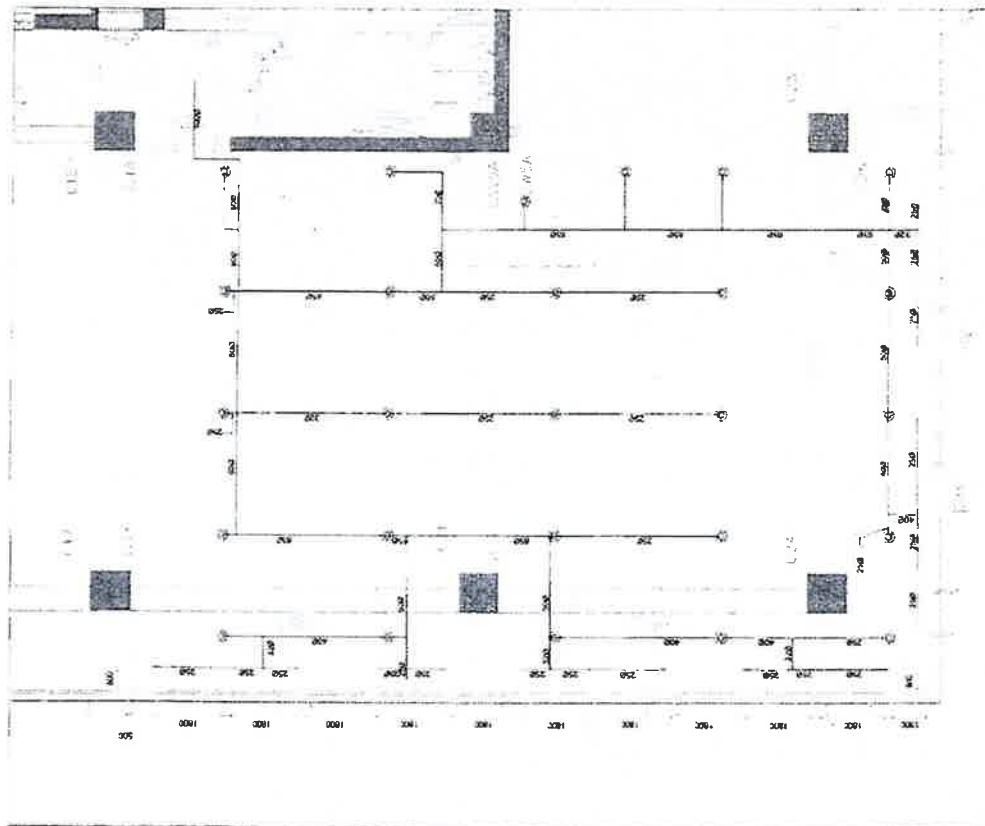
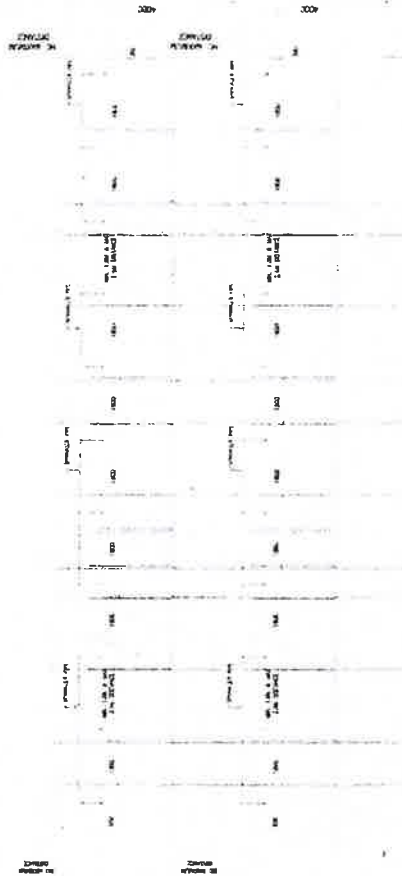


FIGURE 1

SYMBOL	DESCRIPTION
	BUTTERFLY VALVE
	HYDRANT VALVE
	HOSE REEL
	HOSE PIPE & BREAK PIPE
	PRESSURE GAUGE VALVE
	FLOW SWITCH
	BALL VALVE
	SPRINKLER
	CONCEALED TYPE SPRINKLER
	WINDOW SPRINKLER
	SIDE WALL TYPE SPRINKLER
	PENDANT TYPE SPRINKLER



# WINDOW SPRINKLER DETAIL

Chief Engineer  
 Municipal Engineering

RECEIVED  
 FEB 11 1964

**BRIHANMUMBAI MUNICIPAL CORPORATION  
MUMBAI FIRE BRIGADE**

**Brigade Routine Circular No. 12 dated 07.06.2024**

Sub – Issues of PEATA / MCHI Representation approved by Hon. MC Sir  
Ref – Hon. MC Sir Approval vide no. MGC/F/2652 dated 04.03.2024

In order to streamline the procedure in issuance of CFO NOC and other related issues in respect thereof series of meetings, were held from October 2023 to Jan 2024 in the chamber of Jt. MC (Improvement) when CHE (DP), CFO, EE (MCO), PEATA & MCHI representative were present. The various issues were deliberated at length & Pointwise decision taken in the meeting is as below:

	Issue Raised	Discussion	Action
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1	Title of CFO NOC /clearance	NOC from Fire Department to be titled as "Provisional Fire Safety Approval / Clearance" as per DCPR provisions by discontinuing the issuance of NOC as present practice of "Fire Protection Measures & Firefighting Safety requirement".	Agreed
2	Issuance of NOC in the name of Developer / Owner/ Project Proponent/applicant	"Provisional Fire Safety Approval / Clearance" is required to be issued in the Name of Developer / Owner/ Project Proponent as the applicant is the developer / owner/ Project Proponent and CC thereof to LS/ Architect, in line with issuance of IOD, CC & OCC which are issued in the name of the developer / owner/ project proponent.	Agreed
3	Issuance of Plans with respect to CFO completion certificate	While issuing NOC for BCC/OCC, plans shall be issued. In all other NOC's completion certificate with Completion plans are being issued.	Agreed, subject to joint inspection by CFO & BP Department on issuance of CFO "Final Fire Safety Approval / Clearance" for completion / OCC along with completion plans, B.P. Dept will sign at the time of issuance of OCC/BCC by B.P. Department Plans. Thus, plans will be signed by both departments
4	Earlier issued NOC by CFO in the past to be honored	The NOC's which are issued earlier by CFO needs to be honoured and amendments to the same shall be allowed without comments on earlier issued NOC by CFO Dept.	Agreed (Case to Case)
<b>B</b>	<b>Fire Lift</b>		

Issue Raised		Discussion	Action
5	Glass Vision Panel in Fireman Evacuation Lift	Fireman Evacuation Lift car doors and landing doors shall have two hours fire resistance and shall have provision of glass vision for both doors of minimum 1 ft. X 2 ft. and the Glass shall also have two hours Fire resistance	B.R.C No. 52 dated 13/11/2023 to be followed
<b>C Basement Ventilation and Nos. of Basement</b>			
6	Basement Ventilation	Ventilation to the basement can be Either Mechanical Or Natural as per NBC/ DCPR	Agreed with certification from MEPF consultant / Fire Safety Consultant as per DCPR. (However 1 <sup>st</sup> basement with user (eg. Commercial shop or any other as per DCPR shall be naturally ventilated))
7	Basement Compartmentalization	Compartmentation (Area & Type) in basements shall be as per DCPR / NBC	Agreed
8	Number of Basements	Number of Basements are not regulated in DCPR 2034  There is no restriction on the number of basements as per DCPR 2034.  DCPR only stipulates that 1.5 m open space shall be provided for 8.4 m depth of basement & for every additional depth additional 1.5 m shall be provided.	Agreed
<b>D Glass Façade</b>			
9	Design & Provision of Glass Façade	Glass facade details shall be as per DCPR /NBC .	Agreed with certification from MEPF consultant / Fire Safety Consultant as per NBC 2016 part 4 , clause 3.4.10.2.a
10	Provision of Sprinkler	Provision of Sprinkler at certain distance from Glass façade shall be allowed as per NBC.	Agreed
11	Provision of Drencher	Provision of drencher system is being insisted with-out giving reference to any of the code provision / NBC provision.	End of the Sprinkler arrays to be designed in a way to provide the complete linear coverage of the façade, distance between last array of the sprinkler and façade should not be more than 600 mm centre to centre Distance for such sprinklers should not be less than 3.5 m (Sketch enclosed )
<b>E Fire Tower &amp; External Fire Evacuation System</b>			
12	Provision of Fire Tower & External Fire Evacuation System as Reg. 48 (9)(B) of DCPR 2034	As per DCPR Regulation 48 (9) (B) two type of systems any one of which provided shall be Agreed.	Agreed  Fire Tower if proposed shall be as per General arrangement of Fire

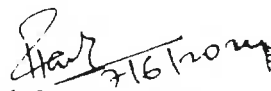
Issue Raised	Discussion	Action
	<p>Provision of Regulation reads as below:</p> <p><i>"For High Rise Building having height more than 70m shall be provided with <b>Fire tower</b> at Landing / Mid-landing Level with Smoke Check Lobby with Firemen's Lift being integral part of the Fire Escape Staircase or <b>Fire Evacuation Lift</b> (Hydropneumatics' / electrically operated) on external face of the building having opening within the fire escape staircase at landing / mid-landing level with smoke check lobby as approved by CFO shall be provided.</i></p> <p><b>Fire Tower</b> if proposed shall be as per General arrangement of Fire Tower as per NBC and/or as per report of the expert Committee regarding Special Safety Regulations formulated by High Court in respect of Manmade disasters.</p> <p><b>Fire Evacuation lift</b> if proposed shall be as per General arrangement and shall be as per sketches approved by CFO</p>	<p>Tower as per NBC and/or as per report of the expert Committee regarding Special Safety Regulations formulated by Hon'ble High Court in respect of Man-made disasters.</p> <p>Fire Evacuation lift if proposed shall be as per General arrangement and it shall be as per sketches (as published in the DCPR-2034) approved by CFO</p>
<b>F Gate &amp; Compound Wall</b>		
13	Width of Compound Wall Gate	<p>Width of GATE shall be as per DCPR / NBC.</p> <p>Agreed.</p> <p>Width of gate shall be as per DCPR / NBC.</p> <p>Width of gate is to be decided based on site conditions / access Road width</p>
14	Compound wall along Front Open Spaces	<p>For safety of building compound wall is basic requirement but CFO is insisting Not to construct compound wall on roadside there is no such provision in DCPR / NBC, earlier same was being allowed.</p> <p>To be decided on case to case basis as per site conditions and road width etc.</p>
15	Condition in CFO NOC level of plot to keep same as abutting road	<p>The condition is incorporated in CFO NOC that the road and plot should be at same level. However, on the road there are footpaths with covered open drains touching compound wall which are at higher level than the road. Hence, ground level within plot must</p> <p>To be decided case to case basis, as per site conditions.</p>

Issue Raised		Discussion	Action
		be adjusted accordingly hence this condition needs modification.	
<b>G Size of Water Tank and Fire Pumps</b>			
16	Size of Underground Water Tanks and Overhead Water Tanks	Size of underground and Overhead water tank shall be as per the relevant provision of DCPR /NBC.	Agreed  Min. Capacity of Overhead Fire Tank will be insisted per Wing and not as per number of staircases.  For Fire tanks capacity Requirements calculations (as per relevant NBC / IS Code) from MEP consultant & report for the same will be insisted
17	Requirements of sizes and numbers of Fire Pumps	Sizes and number of Fire pump shall be as per provisions of NBC / DCPR.	Agreed (as per relevant NBC / IS Code, as NBC always refers IS standards)
<b>H Refuge Area Location</b>			
18	Location of Refuge Floor		
19	Location of Refuge Floor on Terrace	If last floor of building has part terrace and it becomes 7 <sup>th</sup> habitable floor, then as per regulations part terrace shall be treated as refuge area and it shall be on side accessible by Fire Engine.  Despite this being well within the provisions of DCPR the same is not allowed without any specific reason or provision.	Agreed  All the requirements for the refuge area stipulated in DCPR-2034 shall be fulfilled  No opening shall be permitted from the adjoining habitable / non-habitable area.
<b>I General Planning Points</b>			
20	Internet of Things (IoT)	IoT is insisted to be implemented in Residential Buildings without reference to any code.  As per code implementation of IoT Technology is required to be provided in Non Residential Buildings	IF SMART METER with provision of the parameters included in the IOT devices is provided by electricity power supplier then this need not be insisted.
21	Busbar		To be insisted for building above 70 mtrs.
22	Construction Materials used shall be as per Indian Standard Codes (IS Codes)	Type of material to be used RCC or Steel both are permitted in Indian Standard Codes (IS Codes) same shall be respected, it can be used for any structure as per Indian standard Code and its Fire resistance.	Agreed
23	Escalator	Condition of escalator shall be as per NBC Section 5 provided for escalator	Agreed

Issue Raised	Discussion	Action
	& horizontal transportation. At present detailed condition is incorporated without any reference to NBC OR Indian code.	
24 Location & Provision of Fire-Resistant Door (FRD)	Location of FRD shall be as per DCPR/ NBC. Practice of Insisting FRD to the Kitchen to be discontinued.	Agreed
25 Travel Distance to nearest Exit	Travel Distance to nearest Exist shall be as per DCPR provisions	Agreed
26 Artificial Ventilation Shaft	DCPR permits Artificial Ventilation shaft, hence it shall be allowed.	Sketch is annexed herewith Agreed
27 Width of Ventilation Window in Lobby	Width of Ventilation window shall not be a criterion it shall be based on Minimum 1 sqm area per landing & 2.5% of Lobby area. This can be achieved by providing more height with lesser width.	Subject to staircase and common lobby separately ventilated / pressurised Agreed Minimum 1.00 m wide to be insisted
28	The conditions of earlier CFO NOC stands modified as per above.	
<p>The entire committee is of the opinion that the "Consultant for Fire Safety Measures" as per DCPR-2034 to be empanelled by CFO department.</p> <p>As per regulation 2 (iii) of DCPR 2034 <b><i>Terms and expressions neither defined in these Regulations nor defined in (I) and (II) above shall be interpreted with reference to the latest National Building Code in the relevant context.</i></b></p> <p>Additional safety requirements insisted, if any shall be based on Fire Act, NBC and NFPA amended from time to time.</p> <p>Additional conditions or requirements except exceptional cases beyond what is stated above should not be incorporated in CFO NOC.</p>		

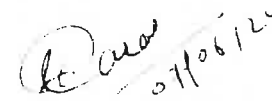
Note –

The above mentioned Minutes shall be implemented with immediate effect i.e. the date of circulation of said BRC.

  
Chief Fire Officer  
Mumbai Fire Brigade

Copy to –

1. All Dy. CFO
2. All DFO
3. All ADFO

  
Dy. Chief Fire Officer  
Mumbai Fire Brigade

**Advisory for the usage of IOT based Microcontroller devices which can sense the abnormal conditions in the electrical circuits and can collect such data on cloud which can be used to analyse the probable faults in the circuits and convey the same to technical person maintaining the installation.**

**SUBJECT:-** Advisory for installation of IOT (Internet of things) devices in high rise buildings.

**REFERENCE:-** 1. Government resolution CEI /2021/PR KR 114/ URJA-5 Dt. 27.08.2021  
2. Mumbai fire brigade circular number 66 dated 14-10 2022

The Brihanmumbai Municipal Corporation has made it mandatory to incorporate and observe installation of IOT devices In the no-objection certificates issued by BMC for all the high rise buildings.

The chief fire officer of Brihanmumbai Municipal Corporation has sought the compliance regarding installation of IOT based microcontroller devices from the office of Chief Electrical Inspector, Government of Maharashtra.

The Plan approvals and the initial charging permissions for the complete electrical installation of high-rise buildings are issued from the office of the respective Electrical Inspectors. Hence for the compliance of the referred advisory from the chief fire officer, it is instructed to the individual electrical inspectors that during the plan approval process, provision for IOT based micro controller device shall be checked and at the time of issuing the initial charging permission, operation of the IOT based micro controller device shall be checked.

A chart containing Minimum Mandatory requirements to ascertain the genuinity of the product, and the tests which are required to be carried out at site to ascertain the functionality of the equipment is Annexed herewith, so that uniformity can be maintained by all the Electrical Inspectors while issuing the initial charging permission.

This annexure shall form as a part of the Test report submitted from the licenced electrical contractor to the electrical inspector's office.

The documentary requirements and the tests to be carried out at site are the minimum set of requirements. The electrical inspectors are at liberty to carry out any other tests or ask for additional documents which are required to ascertain the genuinity of the product and the functionality of the equipment.

**Enclosed:-** Annexure

SANDEEP  
ARVIND  
PATIL  
Digitally signed by  
SANDEEP ARVIND  
PATIL  
Date: 2024.09.24  
16:25:54 +05'30'

**Chief Electrical Inspector,**

**Industry,Energy,Labour and Mining department  
Maharashtra**

Outward No. CEI/Tech/ 36 /2024  
Dt.24/09/2024  
Office of the Chief Electrical Inspector,  
Industries, Energy & Labour Department,3<sup>rd</sup>  
Floor, Administrative Building,Ramakrishna  
Chemburkar Marg,Chembur {\_East),  
Mumbai-400071.

**Copy Submitted to:**

- 1) Hon. Additional Chief Secretary, Energy department, Mantralaya, Govt. of Maharashtra for information.

**Copy to:**

- 2) Joint Secretary, Energy-1 , Energy department, Mantralaya, Govt. of Maharashtra for information.
- 3) Chief Fire Officer, Brihanmumbai Municipal Corporation.
- 4) Director, Maharashtra Fire Services, Santacruz (E), Mumbai.

**Copy Forwarded to:**

- 5) Superintending Engineer, Regional Electrical Inspection Circle, Mumbai / Pune / Nagpur / Aurangabad.
- 6) All Electrical Inspector's Maharashtra State.

**Annexure**  
**Verification & checklist for IOT based Microcontroller device (IoT device)**

Checks during design verification of SLD submitted to Electrical Inspector		
1.	Total installed load capacity.	KVA
2.	Count of single-Phase DB.	Nos
3.	Total number of single Phase IOT devices.	Nos
4.	Count of three Phase DB.	Nos
5.	Total number of three Phase IOT devices.	Nos
6.	Current rating of IOT device matching current rating of DB.	Yes/No
7.	IOT device between meter and DB.	Yes/No

IOT Unit No. \_\_\_\_\_

Checks during installation verification by Electrical Inspector prior to issue compliance.		
1.	Installed IOT device verified by NABL approved lab and meeting requirements for identification and reporting of all faults as per <b>GR No: 2021/114/urja5.</b>	Document
2.	Current rating of IOT device matching current rating of DB.	Yes/No
3.	IOT device between meter and DB.	Yes/No
4.	Installation of IOT device as per approved SLD.	Yes/No
5.	IOT device is confirmed to have stored data on cloud.	Yes/No
6.	In case of electrical abnormalities, are the issues corrected by the owner through the licensed electrical contractor/licensee.	Yes/No
7.	Response to Short Circuit test and storage on cloud.	Yes/No
8.	Response to Open Circuit test and storage on cloud.	Yes/No
9.	Response to Earth Leakage test and storage on cloud.	Yes/No
10.	Response to Neutral loss test and storage on cloud.	Yes/No
11.	Response to Current Unbalance test and storage on cloud.	Yes/No
12.	Response to Phase reversal test and storage on cloud.	Yes/No
13.	Response to Inrush Test and storage on cloud.	Yes/No
14.	Response to Reverse current test and storage on cloud.	Yes/No

Copy of Responses on cloud is enclosed.

Checked and tested by

IOT Device Installer

Govt. Licensed Electrical Contractor



Date: 19<sup>th</sup> Aug 2024

ASK CORPORATION - TOWER A/B/C  
307/66A/1 SURVEY NO 26 (PART)-1,  
NR MUTUMART NAGAR,  
VILLAGE VALNAI LINK ROAD,  
Malad (W), Mumbai-400064.

Dear Sir/ Madam,

Subject: Smart Meter Features for project ASK CORPORATION - TOWER A/B/C Malad (W).

Following up on our recent discussion about the meters installed at your locations, we would like to provide you with an overview of the features available in our meters:

1. **IOT-Based Technology:** The meter installed by Tata Power is an Internet of Things (IOT) based HT meter.
2. **Data Accessibility:** Real-time data can be ~~downloaded~~ <sup>information before fire incident</sup> the next day and this information can be shared for further analysis.

The following parameters can be monitored from the events recorded by our HT meter:

Sr	Electrical parameter	Monitoring	Available in	Previous day	Parameter name in meter
1	Protection to minimize the risk of arcing	No			
2	Short Circuit protection	Yes	Yes	Yes	Power failure
3	Overcurrent protection	Yes	Yes	Yes	Over current
4	Earth leakage protection	Yes-for single phase meters only <i>Thurpan</i>	Yes	Yes	Earth load
5	Over voltage protection	Yes	Yes	Yes	Over Voltage
6	Under voltage	Yes	Yes	Yes	Low Voltage
7	Phase loss protection	Yes	Yes	Yes	Unbalanced Voltage
8	Phase reversal protection	Yes	Yes	Yes	Current Reversal
9	Consideration during loss of supply to neutral	Yes	Yes	Yes	Over voltage, voltage unbalance
10	Voltage quality.	Yes	Yes	Yes	Over voltage, low voltage, voltage unbalance
11	Detection of Loads with low power factor	Yes	Yes	Yes	Low Power Factor

**TATA POWER**

The Tata Power Company Limited

Distribution Customer Services, Dharavi Receiving Station, Near Shallimar Industrial Estate, Matunga, Mumbai- 400019.

Call Centre (Toll Free): 1-800-209-5161; Fax: +91-22-6717 2730; Website: <https://cp.tatapower.com>; Email: [customercare@tatapower.com](mailto:customercare@tatapower.com)

Registered Office: Bombay House, 24 Homi Mody Street, Mumbai - 400 001; CIN: L28920MH1919PLC000567; PAN No: AAAC0054A

12	Detection of Loads with high harmonics	Yes	Yes	No	THD%V & %1
13	Detection of Loads with high inrush	No <i>yes</i>	No <i>yes</i>	No <i>yes</i>	
14	Detection of unbalanced or asymmetric loads	Yes	Yes	Yes	Current Unbalance

Above mentioned events are logged by meters beyond specific threshold and & persistent time.

Protection features are not available in energy meters. As per Electricity Act 2003, after meter out going, protection is to be ensured by consumer.

However, below points shall be noted:

1. Events recorded by the meter is updated in HES/MDM server as per schedule. Hence, events registered by meter on previous day will be available for monitoring.
2. Events/alarms will not be available in case meter is not communicating/defective/powered off.
3. At present this information is available in HES/MOM/Meter data.
4. This information is given as value added service and Tata Power shall not be held liable under any legal implications under any circumstances (It should be noted that this meter is a revenue meter and not designed for this purpose. We are trying to provide this innovative solution through meter data as a value-added service to consumer. However, interest of Tata Power shall be safeguarded in unforeseen events like fire hazards etc.)

Looking forward to your due support & cooperation to enable us successfully to meet your requirement in timely manner.

Thanking you and assuring you of our best attention always.

Yours truly,

For & on behalf of The Tata Power Company limited.

(Vrushal Pimple)  
Zonal Consumer Manager - West Zone  
Mumbai Distribution - Operations.

#### TATA POWER

The Tata Power Company Limited

Distribution Customer Services, Dharavi Receiving Station, Near Shalimar Industrial Estate, Matunga, Mumbai- 400019.  
Call Centre (Toll Free): 1-800-209-5161; Fax: +91-22-6717 2730; Website: <https://cp.tatapower.com>, Email: [customer@tatapower.com](mailto:customer@tatapower.com)  
Registered Office: Bombay House, 24 Homi Mody Street, Mumbai - 400 001; CIN: L28920MH1919PLC000567; PAN No: AAAC0054A