DRAFT MAHARASHTRA ELECTRICITY REGULATORY COMMISSION

ELECTRICITY ACT, 2003.

No. MERC/Legal/_____.—In exercise of the powers conferred under Sections 61 and 86 read with Section 181 of the Electricity Act, 2003 and all other powers enabling it in this behalf, and after previous publication, the Maharashtra Electricity Regulatory Commission hereby makes the following Regulations, namely:—

Preamble:

Section 61 of the Electricity Act, 2003 requires the State Electricity Regulatory Commission to be guided by the factors which encourage competition, efficiency, economical use of the resources, good performance and optimum investments so that Generation, Transmission, Distribution, and supply of electricity are conducted on commercial principles and the consumers interest is safeguarded. Section 181 of the Electricity Act, 2003 mandates the State Electricity Regulatory Commission to make Regulations consistent with the Act and the Rules generally to carry out the provisions of the Act. Capital Investment has a significant impact on the revenue requirement and tariff determination process for regulated entities. It is necessary to ensure that the Capital Investment is regulated in a transparent and consistent manner for all entities, while ensuring economic use of funds.

The Maharashtra Electricity Regulatory Commission (Approval of Capital Investment Schemes) Regulations, 2022 aims to lay down the framework to be followed by all State entities for obtaining the Commission's in-principle approval for proposed Capital Investment as well as the approval to be granted to the final completed cost.

1. Short title, extent, applicability, and commencement

- 1.1 These Regulations may be called the Maharashtra Electricity Regulatory Commission (Approval of Capital Investment Schemes) Regulations, 2022.
- 1.2 These Regulations shall extend to the whole of the State of Maharashtra.
- 1.3 These Regulations shall be applicable to existing and future Generation Businesses/Companies, Transmission Businesses/Licensees, Distribution Businesses/Licensees, State Transmission Utility (STU), Maharashtra State Load Despatch Centre (MSLDC), and their successors[Regulated Power Entities] for approval of Capital Investment, in all matters covered under these Regulations:

Provided that these Regulations shall not be applicable for approval of Capital Cost of new Generating Unit/Station and for additional capitalisation within the original scope of work of new Generating Unit/Station, which shall be regulated as specified in the MERC (Multi-Year Tariff) Regulations, 2019, as amended from time to time.

1.4 These Regulations shall come into force from the date of their publication in the *Official Gazette*.

2. Definitions and Interpretation

- 2.1 In these Regulations, unless the context otherwise requires,---
- (1) **'Act'** means the Electricity Act, 2003 (36 of 2003);
- (2) **'Applicant'** means a Generating Company/Business or Transmission Business/Licensee or Distribution Business/Licensee (including deemed distribution licensee) or MSLDC, who has filed an Application for approval of Capital Investment in accordance with the Act and these Regulations;
- (3) 'Bulk Power Transmission Agreement' means an executed Agreement that contains the terms and conditions under which a Transmission System User is entitled to access to an intra-State transmission system of a Transmission Business/Licensee;
- (4) 'Capital Investment' or 'Capex' means investment proposed by the Applicant against Schemes to meet the objectives specified in Regulation 3 of these Regulations;
- (5) 'Capitalisation' means the amount of Capital Investment put to use, as certified by the appropriate authority, as specified in Regulation 6 of these Regulations;
- (6) 'Change in Law' means occurrence of any of the following events:
 - (i) enactment, bringing into effect or promulgation of any new Indian law; or
 - (ii) adoption, amendment, modification, repeal, or re-enactment of any existing Indian law; or
 - (iii) change in interpretation or application of any Indian law by a competent court, Tribunal, or Indian Governmental Instrumentality, which is the final authority under law for such interpretation or application; or
 - (iv) change of any condition or covenant by any competent statutory authority in relation to any consent or clearances or approval or Licence available or obtained for the Project; or
 - (v) any change in taxes or duties, or introduction of any taxes or duties levied by the Central or any State Government;
- (7) 'Commission' or 'MERC' means the Maharashtra Electricity Regulatory Commission referred to in Section 82 of the Act:
- (8) 'Competitive Bidding' means a transparent process for procurement of equipment, services and works in which bids are invited by the procurer by open advertisement covering the scope and specifications of the equipment, services and works required, and the terms and conditions of the proposed contract as well as the criteria by which bids shall be evaluated, and shall include domestic competitive bidding and international

- competitive bidding;
- (9) 'Cost Benefit Analysis' means the comparison of all costs associated with a particular Capital Investment Scheme with all the objectives and benefits including savings in expenses, arising out of the Capital Investment Scheme;
- (10) 'Cost Benefit Monitoring' means the process of periodic comparison of actual cost benefit, considering both tangible and intangible benefits, and year-wise tariff impact achieved with respect to cost benefit analysis and year-wise tariff impact proposed at the time of in-principle approval for selected Schemes as may be considered necessary by the Commission;
- (11) 'Date of Commercial Operation' or 'COD' shall have the same meaning as defined in the MERC (Multi-Year Tariff) Regulations, 2019, as amended from time to time;
- 'Detailed Project Report Scheme' (or 'DPR Scheme') means a capital expenditure Scheme with projected capital cost exceeding the limits specified in these Regulations, for which the Generating Business/Company or Transmission Business/Licensee or Distribution Business/Licensee or MSLDC is required to obtain prior in-principle approval of the MERC in accordance with these Regulations;
- (13) 'Distribution Business' means the Business of operating and maintaining a distribution system for supplying electricity in the area of supply of a Distribution Licensee;
- (14) 'Distribution Licensee' means a Licensee authorised to operate and maintain a distribution system for supplying electricity to consumers in its area of supply, and includes Deemed Distribution Licensee under Section 14 of the Act and entities exempted from obtaining a Licence under Section 13 of the Act;
- (15) 'Existing Asset' means a Generating Unit/Station or assets of Transmission Business/Licensee or Distribution Business/Licensee or MSLDC declared as under commercial operation prior to notification of these Regulations;
- (16) 'Force Majeure Event' means, with respect to any party, any event or circumstance, or combination of events or circumstances, which is not within the reasonable control of, and is not due to an act of omission or commission of that party and which, by the exercise of reasonable care and diligence, could not have been prevented; and, without limiting the generality of the foregoing, shall include the following events or circumstances:
 - (i) acts of God, including but not limited to lightning, storm, action of the elements, earthquakes, flood, torrential rains, drought, and natural disaster;
 - (ii) strikes and industrial disturbances having a State-wide or extensive impact in the area of supply of a Licensee, but excluding strikes and industrial disturbances in the Licensee's own organisation;
 - (iii) acts of war, invasion, armed conflict or act of foreign enemy, insurrections, riots,

- revolution, terrorist, or military action;
- (iv) unavoidable accident, including but not limited to fire, explosion, radioactive contamination, and toxic chemical contamination;
- (v) any shutdown or interruption of the grid, which is required or directed by the concerned Load Despatch Centre;
- (17) 'Generation Business' means the Business of production of electricity from a Generating Station for the purpose of supply of electricity to any Distribution Business/Licensee in accordance with the Act and the rules and regulations made thereunder;
- (18) 'Generating Company' means any company or body corporate or association or body of individuals, whether incorporated or not, or artificial juridical person, which owns or operates or maintains a generating Station;
- (19) 'Generating Station' means a Station or a Unit thereof for generating electricity, including any building and plant with step-up transformer, switch-gear, switch yard, cables or other appurtenant equipment used for that purpose and the site thereof; a site intended to be used for a generating Station, and any building used for housing the operating staff of a generating Station, and where electricity is generated by water-power, includes penstocks, head and tail works, main and regulating reservoirs, dams and other hydraulic works, but does not include any sub-Station;
- (20) 'Group Company' means two or more enterprises which, directly or indirectly, are in position to:
 - (i) exercise twenty-six per cent, or more of voting rights in other enterprise; or
 - (ii) appoint more than fifty per cent of members of board of directors in the other enterprise, a subsidiary company of the concerned entity, or a sister subsidiary company, or a Special Purpose Vehicle (SPV) under a common holding company;
- (21) 'High Tension' (or 'HT') means all voltages above and including 650 Volt and up to and including 33 kilo Volt;
- (22) 'Indian Governmental Instrumentality' means the Government of India, State Government and any Ministry or Department or Board or Agency controlled by Government of India or the Government of the State where the Project is located or regulatory or quasi-judicial authority constituted under the relevant statutes in India;
- (23) 'Low Tension' (or 'LT') means all voltages below 650 Volt;
- (24) 'Licensee' for the purpose of these Regulations shall mean a Transmission Licensee or Distribution Licensee, as the case may be, duly authorised by the Commission;
- (25) 'Non-DPR Scheme' means a capital expenditure Scheme with projected capital cost

within the limits specified in these Regulations, for which the Generating Business/Company or Transmission Business/Licensee or Distribution Business/Licensee or MSLDC is not required to obtain prior in-principle approval of the Commission;

- (26) 'Officer' means an officer of the Commission;
- (27) 'Operation and Maintenance expenses' or 'O&M expenses' means the expenditure incurred on operation and maintenance of a project or part thereof to upkeep the project to operate at full capacity, and includes the expenditure on manpower, repairs, replacement of the parts of the assets, tools and tackle's, testing equipment, spares, consumables, insurance and overheads;
- (28) 'Opex Schemes' are Schemes proposed to be undertaken by the Generating Business/Company or Transmission Business/Licensee or Distribution Business/Licensee or MSLDC for Operation and Maintenance of the asset, wherein the payments will be linked to the performance and deliverables throughout the contract period, including but not limited to system automation, maintenance, new technology and IT implementation, etc., as specified in the MERC (Multi-Year Tariff) Regulations, 2019, as amended from time to time;
- (29) 'Other Business' means any businesses undertaken by the Generating Business/Company or Transmission Business/Licensee or Distribution Business/Licensee for optimum utilisation of its assets, apart from the electricity business regulated by the Commission;
- (30) 'Project' means a Generating Station and the evacuation system up to the Inter-connection Point, or a Transmission Project as the case may be; and excluding Small Hydro Power Generating Station;
- (31) 'Prudence Check' means the scrutiny of reasonableness of capital investment incurred or proposed to be incurred, financing plan, use of efficient technology, scope of work, cost and time over-run and such other factors as may be considered appropriate by the Commission in accordance with these Regulations;
- (32) 'Sister Concern' means two or more Companies, including a Special Purpose Vehicle (SPV) owned or controlled by the same entity or person;
- (33) 'State Grid Code' means the Code specified by the Commission under clause (h) of subsection (1) of Section 86 of the Act;
- (34) 'Tariff Based Competitive Bidding' or 'TBCB' in case of Transmission Projects means the procurement of Transmission Services in accordance with the 'Guidelines for Encouraging Competition in Development of Transmission Projects' notified by the Ministry of Power, Government of India, under Section 63 of the Act, as amended from time to time;

- (35) 'Transmission Business' means the Business of establishing or operating transmission lines under a Transmission Licence;
- (36) 'Transmission Licensee' means a Licensee authorised by the Commission to establish or operate transmission lines under Section 14 of the Act and includes entities exempted from obtaining a Licensee under Section 13 of the Act;
- (37) 'Useful Life' shall have the same meaning as defined in the MERC (Multi-Year Tariff) Regulations, 2019, as amended from time to time;
- (38) 'Year' means a Financial Year.
- 2.2 Save as aforesaid and unless repugnant to the context or if the subject matter otherwise requires, words and expressions used in these Regulations, which are not specifically defined herein but defined in the Act, shall have the meaning assigned to them in the Act; and, if not defined in the Act, shall have the meaning assigned to them in any Act of the Parliament or the State Legislature applicable to the electricity industry and the Regulations framed by the Commission under the Act.

3. Categorisation of Capital Investment Schemes

- 3.1 Any one or a combination of the following objectives needs to be fulfilled by the proposed Capital Investment Schemes for being considered for approval in accordance with these Regulations:
 - (a) New Infrastructure to meet upcoming load;
 - (b) Augmentation of capacity of the existing project/system;
 - (c) Increase in transformation capacity;
 - (d) Increase in revenue from the assets;
 - (e) Increase in operational efficiency of existing system;
 - (f) Increase in the Useful Life of the entire project/scheme/assets;
 - (g) Replacement of the entire asset after completion of Useful Life and which has gone beyond repair;
 - (h) Improvement in power quality and reliability
 - (i) Reduction in maintenance requirements;
 - (j) Renovation and Modernisation for life extension of entire project;
 - (k) Improvement in system parameters:

Provided that Renovation and Modernisation Schemes for Generation Business and Transmission Business shall be in accordance with relevant Guidelines notified by the Central Electricity Authority (CEA).

3.2 Asset replacement shall not be approved merely because the asset has completed its Useful Life as specified in the applicable Regulations, and the Applicant will have to submit adequate justification for the asset replacement based on aspects such as inter-

alia, residual life as certified by competent agency, performance degradation based on the diagnostic testing, assets beyond repair and cost-benefit analysis of repair versus replacement.

- 3.3 The certificate from the competent agency referred in Regulation 3.2 shall be required only in case the replacement of assets is premature without completion of regulated life or obsolescence of the technology and there are alternatives to replacement under capital expenditure.
- 3.4 Replacement of the assets shall be the last resort and not the first priority:

Provided that while proposing the assets for replacement, only essential scope shall be considered to optimise the project cost.

- 3.5 The indicative list of various categories under which Generating Companies or Generating Businesses may file Capital Investment Schemes for approval are:
 - (a) Improvement in operational performance parameters of Generating Unit/Station;
 - (b) Compliance with environmental norms notified by the concerned Indian Governmental Instrumentality and requires to set up additional assets that qualify under the criteria specified for Capital Investment Schemes;
 - (c) Renovation & Modernization in accordance with the provisions of the MERC (Multi-Year Tariff) Regulations, 2019, as amended from time to time;
 - (d) Replacement of Asset on account of inter-alia, completion of Useful Life and in beyond repairable condition, performance degradation, need for induction of new efficient technology;
 - (e) Emergency Restoration Works involving asset replacement;
 - (f) Civil work such as office building, approach road, etc.;
 - (g) Obsolescence of assets and absence of support from Original Equipment Manufacturer;
 - (h) Replacement of Battery Sets and battery charger after completion of Useful Life and assets becoming irreparable:

Provided that the Repair and Maintenance of the existing roads and building shall not be claimed as capital expenditure.

- 3.6 The Generating Companies or Generating Businesses shall submit separate Capital Investment Schemes for each Generating Unit/Station, as appropriate.
- 3.7 The Capital Investment Schemes submitted by Generating Companies or Generating Businesses shall be corelated to the remaining tenure of the Power Purchase Agreement with the Distribution Licensee.
- 3.8 The indicative list of various categories under which Transmission Business/Licensees

may file Capital Investment Schemes for approval are:

- (a) Evacuation of power from upcoming Generation Unit/Station;
- (b) Erection of Air Insulated Sub-station (AIS) or Gas Insulated Sub-station (GIS) and associated transmission lines;
- (c) Capacity augmentation at existing Transmission Sub-station and Transmission Lines;
- (d) Construction of transmission link or tie-lines for interconnections between Substations and/or Transmission Lines;
- (e) System strengthening to mitigate overloading or to provide redundancy or to improve voltage profile or reactive power management through installation of reactors.
- (f) Network improvement to ensure reliability and availability of network;
- (g) Installation or Upgradation of Supervisory Control and Data Acquisition (SCADA);
- (h) Installation or Upgradation of communication and/or control equipment;
- (i) Interface metering and communications;
- (j) Renovation & Modernisation in accordance with the provisions of the MERC (Multi-Year Tariff) Regulations, 2019, as amended from time to time;
- (k) Replacement of Asset on account of inter-alia, completion of Useful Life, performance degradation, need for induction of new efficient technology;
- (l) Emergency Restoration System involving asset replacement;
- (m) Obsolescence of assets and absence of support from Original Equipment Manufacturer;
- (n) Civil work such as office building, approach road for transmission construction, etc.:

Provided that the Repair and Maintenance of the existing roads and building shall not be claimed as capital expenditure.

- 3.9 The Transmission Business/Licensees shall submit separate Capital Investment Schemes for each Transmission Scheme, as appropriate.
- 3.10 Under normal circumstances, the cost of premature replacement/shifting of the assets because of projects of other utilities such as road widening, construction/strengthening of dams, removal of obstacles, and freeing space for other project, shall be recovered/recoverable from the concerned infrastructure development agency:

Provided that the premature replacement/shifting of the assets because of projects of other utilities as stated above may be treated as capex scheme depending on circumstances and justification, in cases where the same is not recovered/recoverable from the concerned infrastructure development agency.

3.11 The indicative list of various categories under which Distribution Business/Licensees

may file Capital Investment Schemes for approval are:

- (a) Infrastructure required for releasing new supply connections;
- (b) System strengthening by enhancing capacity of inter-alia, Sub-station, cables, and Circuit Breaker, to mitigate overloading or to provide redundancy or to improve voltage profile;
- (c) Agriculture feeder separation;
- (d) Justified conversion of Overhead Wires to Underground Cables based on the approved Policy document by concerned Local Government and vetted by the State Government and/or the Commission;
- (e) Capital Nature Schemes funded partially by Central or State Government Grants;
- (f) Upgradation of distribution network in a particular area including ring main system;
- (g) Installation of Receiving Sub-station, distribution lines and transformers to cater to demand in a particular area;
- (h) Capacity augmentation of distribution lines and transformers at existing Substations or Receiving Stations;
- (i) Improvement in quality of supply and reliability of distribution system;
- (j) Emergency Restoration System involving asset replacement;
- (k) Installation or Upgradation of Supervisory Control and Data Acquisition (SCADA);
- (l) Installation or Upgradation of communication and/or control equipment;
- (m) Setting up Distribution Supply Operation Centre (s)
- (n) Implementation of Smart Meters and/or Pre-paid meters;
- (o) Improvement in consumer services;
- (p) Obsolescence of assets and absence of support from Original Equipment Manufacturer;
- (q) Civil work such as office building, approach road, etc.:

Provided that the Repair and Maintenance of the existing roads and building shall not be claimed as capital expenditure.

- 3.12 The Distribution Business/Licensees shall submit combined DPR for entire State/licence area in case of consumer Metering Schemes, Metering of Feeders, Distribution Transformers, Sub-stations, Advanced Metering Infrastructure, creation of sub-stations, replacement/upgradation of transformers, Government grant funded Schemes, etc.
- 3.13 The Distribution Business/Licensees may consider implementation of Smart Meters and/or Pre-paid meters under Total Expenses or TOTEX (Capex Expenditure + Opex Expenditure) model.
- 3.14 Under normal circumstances, the cost of premature replacement/shifting of the assets

because of projects of other utilities such as road widening, removal of obstacles, and freeing space for other project, shall be recovered/recoverable from the concerned infrastructure development agency:

Provided that the premature replacement/shifting of the assets because of projects of other utilities as stated above may be treated as capex scheme depending on circumstances and justification, in cases where the same is not recovered/recoverable from the concerned infrastructure development agency.

- 3.15 Capital investment proposals of Distribution Licensees for conversion of Overhead Lines to Underground Cables shall be allowed only if such proposals are in accordance with a comprehensive policy to be prepared by the Distribution Licensee.
- 3.16 The comprehensive Policy for conversion of Overhead Lines to Underground Cables referred in Regulation 3.15 shall be based on the following criteria:
 - (a) Whether the proposed conversion from Overhead Lines to Underground Cables satisfies the criteria laid down by CEA in the 'Guidelines for use of under Ground Cable System and Overhead Conductor System along with cost benefit analysis', 2018:
 - (b) The purpose of undertaking such Scheme in terms of addressing safety concerns or improving reliability or reducing losses or combination of these need to be clearly identified;
 - (c) Whether use of other cheaper options such as Aerial Bunched Cables, ring main of Overhead network, etc., would resolve the issues being faced;
 - (d) Whether complete conversion of Overhead network (High Tension and Low Tension) to Underground network is required or partial undergrounding of network is sufficient to resolve the issues being faced;
 - (e) Whether the conversion from Overhead Lines to Underground Cables has been prioritised based on certain intelligible criteria;
 - (f) Whether the Average Billing Rate (ABR) of such area where project is proposed is higher than the Average Cost of Supply (ACoS) of the concerned Distribution Licensee:
 - i. Conversion of Overhead Lines to Underground Cables not to be considered in cases where the ABR is lower than the ACoS;
 - ii. Conversion of Overhead Lines to Underground Cables to be considered in cases where the ABR of that area is higher than the ACoS, and if the number of years required to recover the capital investment of the proposed Scheme from available margin between ABR and ACoS is equal to or lower than the stipulated payback period of say 5 years;
 - (g) In case the Scheme is to be undertaken despite not meeting above criteria, then the cost of such investment shall be funded through:

- i. Subsidy or Viability Gap Funding (VGF) from Government or Local Body or Planning Authority (MIDC, MMRDA, etc.), or
- ii. Recovered from the consumers located in that area through additional charges to be determined separately and shall not be socialised over the Aggregate Revenue Requirement (ARR) of the concerned Distribution Licensee, or
- iii. A combination of i and ii above.
- 3.17 Such Schemes for conversion of Overhead Lines to Underground Cables shall identify quantifiable and measurable parameters to be achieved post execution of such Scheme, which shall be monitored continuously and any deviation reported to the Commission.
- 3.18 Premature replacement/shifting of the assets because of projects of other utilities as stated above may be treated as capex scheme depending on circumstances and justification, in cases where the same is not recovered/recoverable from the concerned infrastructure development agency.
- 3.19 In order to mitigate the impact of varied and high Reinstatement (RI) Charges levied by the Urban Local Bodies for laying down underground distribution infrastructure, fifty (50) percent of the capital cost due to RI shall be recovered from the consumers of the concerned local area through an additional charge to be approved by the Commission from time to time:

Provided that Distribution Licensees may take up this issue with Urban Development Department of the State Government for reducing/eliminating such charges, which may consider making provision of cable trench alongside the road mandatory so as to avoid digging of the road for laying down underground infrastructure:

Provided further that Distribution Licensees shall pursue with the concerned Urban Local Bodies for the excess RI Charges collected for any Scheme in accordance with Rule 12 of the Maharashtra Electricity Works of Licensees Rules, 2012, and pass on the refund to the consumers from whom such RI cost has been recovered.

- 3.20 The various categories under which MSLDC can file Capital Investment Schemes for approval are:
 - (a) New infrastructure related to setting up of Area Load Despatch Centres in other parts of the State;
 - (b) Information Technology related software and hardware including SCADA;
 - (c) Software/Servers for Energy Accounting and Deviation Settlement;
 - (d) Civil work such as office building, etc.:

Provided that the Repair and Maintenance of the existing roads and building and annual maintenance of software shall not be claimed as capital expenditure as this type of work are of O&M nature especially when not taken up in time result in unjustified special

- 3.21 The indicative list of various categories of Schemes that shall not be allowed as Capital Investment Schemes (DPR as well as Non-DPR) for Generating Companies/ Businesses or Transmission Licensees/Businesses or Distribution Licensees/Businesses/MSLDC(Applicant) is as follows:
 - (a) Replacement/repairing of individual items such as Current Transformer (CT), Potential Transformer (PT), Lightning Arrestor (LA), Circuit Breaker (CB), Distribution Box, Cables, LT switchgears, protection system, Insulators and Hardware after failure;
 - (b) O&M/overhauling of the equipment such as CB, Transformers, ICTs, Coal Mills, Boiler, Compressor, Generator, Alternator, Coal Handling Plant, Ash Handling Plant, etc.;
 - (c) Replacement of small part of the entire system such as Relays of Sub-stations, control, protection and communication panels of Sub-station equipment, replacement of the panel meters, reprogramming of meters;
 - (d) Replacement of the members of the Transmission Towers, increasing height of the towers, replacement of few towers, replacement of few spans of the conductor of Transmission lines, re-earthing of the Sub-stations and Towers, Strengthening of Towers/Poles, replacement of motors, gearbox, Stators, Rotors, Coal Mill parts, Security System (including digital), replacement of protection and control system, water supply system, replacement of ancillary system/Street Lights, etc.;
 - (e) Premature Replacement of Air Insulated Substation (AIS) with Gas Insulated Substation (GIS)/Underground Cables/Transmission Lines/other equipment before completion of useful life, and even after completion of useful life in cases where replacement is not justified based on the diagnostic test reports/Study report;
 - (f) Foundation strengthening of the Towers/Poles, substation equipment, internal civil work, repair and maintenance of office/residential quarters/guest house and office building, Metal spreading in yard, furniture, Repair and maintenance of control rooms, Compound wall for the Sub-stations and empty land, street light replacement, R&M of existing roads and buildings, etc.;
 - (g) Procurement of maintenance spares, testing tools and kits, maintenance tools, Annual Maintenance Contract (AMC);
 - (h) Beautification projects unless the same is justified as per the pre-decided Policy;
 - (i) Distribution/Generation scope of work included in Transmission DPR, Transmission Scope included in Generation DPR, etc.;
 - (j) DPR for only land without any project proposal;
 - (k) Development of Garden, Advertisement expenses;
 - (1) Premature replacement of the equipment, cables, rerouting of cables/lines for freeing

the space for other project/infrastructure activities of Utility;

- (m) Work required for restoration of supply post occurrence such as Tower collapse, conductor snapping, shifting of the Tower/poles on consumer request;
- (n) Clubbing of scope of work of O&M nature at different plants, substations, lines;
- (o) Opex Schemes as provided in the Regulations;
- (p) Expenditure that should be taken up under O&M expenses;
- (q) Transmission Schemes that are not included in the STU Plan;
- (r) Schemes that are not included in the Rolling Plan of the concerned Utility;
- (s) Schemes that have not obtained the Commission's in-principle approval, unless they are exempted.
- 3.22 Schemes proposing asset replacement shall be allowed only if the following conditions are fulfilled:
 - (a) Complete asset replacement after completion of Useful Life as per Regulations subject to asset being beyond repair, residual life certification, performance degradation, cost-benefit analysis of repair vs. replacement, technology and/or equipment obsolescence, no support of OEM, etc.;
 - (b) Complete asset replacement before completion of Useful Life as per Regulations subject to asset being beyond repair, performance degradation, cost-benefit analysis of repair vs. replacement, technology and/or equipment obsolescence, no support of OEM;
 - (c) Part asset replacement after completion of Useful Life as per Regulations, if comprising more than twenty-five (25) percent of the cost of complete equipment;
 - (d) On account of technology obsolescence, subject to certification of Technical Expert body like CEA and comprising more than twenty-five (25) percent of the cost of complete equipment;
 - (e) On account of equipment obsolescence, subject to communication from Original Equipment Manufacturer (OEM) confirming discontinuation of support:

Provided that in case certain Schemes for asset replacement are allowed by the Commission under exceptional circumstances despite not fulfilling the above conditions, then the Applicant may be entitled to lower rate of Return on Equity on such investment, as may be specified in the applicable MERC (Multi-Year Tariff) Regulations.

- 3.23 The Applicant may also submit Opex Schemes for approval of the Commission, which shall be considered as separate from Capital Investment Schemes.
- 3.24 For Opex Schemes, the Applicant shall submit detailed justification and cost benefit analysis and life-cycle cost analysis of such schemes including savings in O&M expenses, as specified in the MERC (Multi-Year Tariff) Regulations, 2019, as amended from time to time.

- 3.25 For Opex Schemes, the Applicant may consider operational advantages in management as one of the benefits.
- 3.26 The purpose of the Scheme shall be given importance rather than the nature of the work or funding pattern, while deciding whether it is a Capex Scheme or Opex Scheme:
 - Provided that the onus of achievement of the proposed improvements in the set parameters shall lie with the Applicant.

4. Framework for Approval of Capital Investment

- 4.1 Capital Investment Schemes of a value exceeding Rupees Twenty-five crore or such other amount as may be stipulated by the Commission from time to time shall be considered as DPR Schemes:
 - Provided that the limit shall be Rupees One crore for MSLDC and Deemed Distribution Licensees other than Maharashtra State Electricity Distribution Company Limited (MSEDCL):
- 4.2 Capital Investment Schemes of a value below the values specified in Regulation 4.1 shall be considered as Non-DPR Schemes.
- 4.3 The Commission shall approve the Capital Investment in the following two stages:
 - (a) In-principle approval prior to undertaking the capital investment against DPR Schemes:
 - (b) Final approval of completed cost after asset is put to use.
- 4.4 Prior in-principle approval shall not be required for Non-DPR Schemes or hundred (100) percent Grant funded Schemes or Schemes that fall under emergency works.
- 4.5 Prior in-principle approval shall be required for DPR Schemes funded partly by Grants where the contribution or share of the Application in terms of debt and equity is higher than the limit specified in Regulation 4.1.
- 4.6 In case of emergency works, the Applicant shall approach the Commission within 30 days from the start of the work and shall submit the DPR complete in all respects for approval of the Commission with due approval of its competent authority.
- 4.7 The prior in-principle approval granted by the Commission for the Capital Investment shall be considered as an Order issued by the Commission.
- 4.8 All Capital Investment Schemes of a value exceeding Rupees Twenty-five crore and up to Rupees Fifty Crore shall be first scrutinised by the Capital Investment Scrutiny Committee (CISC) to be set up by the Commission through separate notification for scrutiny of such proposals:

- Provided that an external expert or agency may be co-opted by the CISC from time to time for necessary inputs and expertise.
- 4.9 For Schemes categorised for scrutiny by the CISC, the Applicants shall make a presentation to the CISC on the salient features of the Capital Investment Scheme in order to facilitate better understanding of the Scheme.
- 4.10 The concerned officers of the Commission shall analyse the Schemes in detail, raise deficiencies and queries on the Scheme, and after detailed analysis, put up each qualified Scheme for the consideration of the CISC.
- 4.11 The CISC shall submit its recommendations to the Commission for due consideration along with due analysis and justification within a maximum time period of two months from the date each qualified Scheme has been first put up to the CISC for consideration:
 - Provided that the CISC shall finalise its recommendations on each Scheme after a maximum of two (2) deliberations:
 - Provided further that if the scheme is not justified or the Applicant does not submit the requisite information as sought within stipulated time, CISC may return the scheme to the Applicant with the reasons for doing so in writing.
- 4.12 For Capital Investment Schemes of a value exceeding Rupees Fifty crore and up to Rupees Hundred Crore, the Applicants shall make a presentation to the Commission on the salient features of the Capital Investment Scheme in order to facilitate better understanding of the Scheme.
- 4.13 The concerned officers of the Commission shall analyse in detail such Schemes of a value exceeding Rupees Fifty crore and up to Rupees Hundred Crore, raise deficiencies and queries on the Scheme, and after detailed analysis, put up each qualified Scheme for the consideration of the Commission.
- 4.14 For Capital Investment Schemes of Generation Business and Distribution Business of a value exceeding Rupees Hundred crore, the Applicants shall make a presentation to the Commission on the salient features of the Capital Investment Scheme in order to facilitate better understanding of the Scheme.
- 4.15 The concerned officers of the Commission shall analyse in detail such Schemes of Generation Business and Distribution Business of a value exceeding Rupees Hundred crore, raise deficiencies and queries on the Scheme, and after detailed analysis, put up each qualified Scheme for the consideration of the Commission:

Provided that an external expert or agency may be consulted by the Commission from time to time for necessary inputs and expertise while evaluating such Schemes.

4.16 For Capital Investment Schemes of Transmission Business of a value exceeding Rupees Hundred crore, the STU shall evaluate the technical feasibility and financial prudence of the Scheme based on least cost analysis and sensitivity analysis, in accordance with Regulation 13 of the Maharashtra Electricity Grid Code, 2020 and the Prudence Check framework specified in Regulation 8 of these Regulations:

Provided that while undertaking the technical evaluation of such Schemes, the STU shall bear in mind the issues related to reactive power management, associated distribution network development, load bifurcation/re-orientation, available alternatives, management of outlets for Distribution Licensees, etc.

- 4.17 The decision on undertaking Transmission Schemes of a value exceeding Rupees Hundred crore shall be taken after due deliberation between the stakeholders in the Grid Co-ordination Committee and/or Maharashtra Transmission Committee, formulated as per the Maharashtra Electricity Grid Code, 2020, as appropriate.
- 4.18 When the Application is made for approval of such Transmission Schemes of a value exceeding Rupees Hundred crore under these Regulations, the Commission shall only ensure that the STU has followed the due process laid down in the Maharashtra Electricity Grid Code, 2020 and the provisions of these Regulations, before granting approval for such Schemes.
- 4.19 In case the Grid Co-ordination Committee and/or Maharashtra Transmission Committee, as applicable, is unable to agree on certain aspects of such Transmission Schemes of a value exceeding Rupees Hundred crore, then the Application made to the Commission for approval of the Scheme shall be evaluated in accordance with the procedure laid down in Regulations 4.14 and 4.15:

Provided that Grid Co-ordination Committee and/or Maharashtra Transmission Committee, as applicable shall carry out deliberations and necessary studies before concluding the matter:

Provided further that if the Grid Co-ordination Committee and/or Maharashtra Transmission Committee, as applicable, are unable to agree on certain aspects of such Transmission Schemes then it shall note down the reasons for non-agreement and the same shall be submitted along with the DPR for the Commission's approval.

- 4.20 The Commission may review the value limit for consideration as DPR Scheme as specified in Regulations 4.1, 4.8, 4.12, 4.14 and 4.16 once in every three years, and stipulate a different value limit through separate Order, as appropriate.
- 4.21 The Applicant may file the Application for in-principle approval of DPR Schemes in April and October of every financial year, on or before 30th April and 31st October, respectively:

Provided that the Application for in-principle approval of DPR Schemes shall be filed under a single covering letter, along with the consolidated cost benefit analysis and tariff impact for all the Capital Investment Schemes:

Provided further that any Application filed after 30th April and 31st October, respectively, shall be considered along with the next filing, as applicable.

4.22 Distribution Licensees shall submit separate application for approval of Capital Investment for each Distribution Zone or equivalent area, except for Schemes related to metering, centralised purchase such as Distribution Transformers, Cable, and other equipment, which may be submitted for the Distribution Licensee as a whole:

Provided that the Distribution Licensees may club Schemes for being considered as a DPR Scheme only for the categories of capital investment schemes specified under Regulation 3, for in-principle approval under these Regulations:

Provided further that the Distribution Licensees may club Distribution Schemes partly funded by Government grants such as DDUGJY, IPDP, RDSS, SAUBHAGYA, etc.

- 4.23 Transmission Licensees may club the similar type of capital work of particular Zone/Circle-wise to minimise the number of Schemes.
- 4.24 The Transmission Business/Licensees or Distribution Business/Licensees or MSLDC shall not club the O&M Schemes or Non-DPR Schemes to qualify as DPR Scheme:
 - Provided that the Transmission Business/Licensees or Distribution Business/Licensees or SLDC shall not club the O&M Schemes to qualify as Non-DPR Scheme.
- 4.25 The Generating Business/Company, Transmission Business/Licensees or Distribution Business/Licensees or SLDC shall not split the scope of work into small parts to qualify as Non-DPR Schemes.
- 4.26 The Applicants shall not be allowed to club unrelated Schemes for being considered as a DPR Scheme for in-principle approval under these Regulations.
- 4.27 The Final approval of completed cost after asset is put to use shall be sought along with the claim for true-up for any financial year filed along with the appropriate Petition for approval of Multi-Year Tariff or Mid-Term Review, in accordance with the MERC (Multi-Year Tariff) Regulations applicable at that point in time.

5. Application for In-Principle Capital Investment Approval

5.1 The Application for in-principle approval of Capital Investment shall necessarily comprise the following particulars:

(1) Overview of Scheme

- a. Name of the Scheme;
- b. Date of approval by competent authority, duly authorised by the Company's Board of Directors, along with documentary evidence;
- c. Categorisation of Scheme under Regulation 3 of these Regulations;
- d. Location of the project including GPS co-ordinates;
- e. Brief scope of work;
- f. Objective of the capital investment;
- g. Technical specifications of the scope of work;
- h. Reference of Study Report or Recommendations of well-reputed Government Institute or Expert agency such as CPRI /ERDA etc., as applicable;
- i. Estimated cost and basis of the same;
- j. Completion Schedule of the capital investment with Project Evaluation and Review Technique (PERT) Chart;
- k. Year-wise capital investment and proposed capitalisation;
- l. Funding arrangement with break-up of grants, consumer contribution, debt, equity, as applicable;
- m. Quantifiable, verifiable and monitorable tangible and intangible benefits of the capital investment;
- n. Overall cost-benefit analysis;
- o. Checklist of the supporting documents appended;
- p. Any other relevant documents required based on the nature of the scheme.

(2) **Justification for Scheme**

- Need for the capital investment with adequate back-up documentation in terms of inter-alia load flow studies, projected load growth, new connection applications, recommendations of Original Equipment Manufacturer or expert;
- b. All Transmission and Distribution Schemes shall be prepared considering overall system requirement, existing infrastructure and ongoing capital investment projects, and not only for specific area, in order to ensure against over-investment in certain districts/areas;
- Urgency of the capital investment in terms of scope for and impact of phasing and/or deferment, as well as implications of not undertaking the capital investment;
- d. Single Line Diagram of the proposed Scheme and Grid maps of relevant areas;
- e. Detailed route survey for Transmission Schemes;
- f. Technical justification
 - i. Basis for consideration as a Capital Investment Scheme rather than Opex Scheme or expenditure to be undertaken under O&M expenses;
 - ii. Statutory requirement, if any which is capital nature;

- iii. Inclusion in STU Plan for Transmission Schemes and prepared as per the provisions of the State Grid Code as amended from time to time;
- iv. Expected benefits of Capital Investment in terms of inter-alia development of the new infrastructure, augmentation of existing infrastructure, improvement in operational parameters/efficiency; improvement in quality of supply, improved load management, increased redundancy, evacuation of upcoming generation, adoption of latest technology, and release of new connections;
- v. Past trends and projections of concerned operational performance for next five years, with and without proposed capital investment, in case the Scheme is for improvement of operational performance;
- vi. Justification for quantities proposed for various items;
- vii. Basis/test report/diagnostic test report, etc., if the Scheme is for replacement of the existing assets;
- viii. Compliance of the Central Electricity Authority (CEA) transmission planning criteria, provisions of the State Grid Code, etc., as amended from time to time;
 - ix. Request letter and demand projections of phasing of load of Distribution Business/Licensee or request letter from consumer/s, as applicable;
 - x. Details of loading of asset, future load projections, and basis for load projections;
 - xi. NOC of CTU, in case the scheme is incidental to the ISTS.
- g. Financial justification/Cost analysis:
 - i. phasing of capital investment and capitalisation;
 - ii. cost assessment with break-up of equipment cost, installation cost,
 Project Management expenses or turnkey cost, as applicable,
 contingencies, interest during construction;
 - iii. Impact of taxation on the project cost;
 - iv. Reasonability/comparison of rates considered for estimation;
 - v. Ensuring that only necessary scope of work is considered for execution;
 - vi. Efforts taken by the utilities to optimise the project cost;
 - vii. least cost analysis considering all possible alternatives to the proposed scheme to achieve the desired objectives and merits and demerits of the various alternatives, considering the economic, technical and environmental aspects of all such alternatives, to ensure that the proposed option is the least cost option available;
 - viii. funding arrangements;
 - ix. projected revenue addition;
 - x. projected reduction in operating costs;

- xi. Cost-Benefit analysis in terms of comparison of the investment Cost with technical and financial benefits, quantified objective of the Scheme, overall benefit to the entity, year-wise realisation of target objectives, year-wise tariff impact in Rs./kWh for the first five years after commissioning of proposed capital investment, financial investment criteria such as inter-alia Payback Period, Internal Rate of Return (IRR), and Net Present Value (NPV);
- xii. Copy of the verification of the land cost issued by the District Revenue Authority if the land is acquired before the in-principle approval of the scheme, along with the utilisation of the proposed land:

 Provided that if excess land is acquired without adequate justification, then the Commission may allow the cost of the necessary land only.
- h. Methodology by which the Scheme's progress can be monitored and corrective action to be taken in case of any deviation from the schedule;
- i. Methodology for verification of Scheme being put to use and projected percentage utilization of the assets for the first five years after commissioning of proposed capital investment;
- j. Details of required upstream/downstream arrangements, if any, for realisation of the benefits from the proposed Scheme, and their status and programme for their completion;
- k. List and Status of Statutory Clearances/Approvals required to execute the project;
- Physical and financial constraints, if any, in execution of the Scheme, and identification of all possible delays and their causes and proposed mitigation measures.
- 5.2 The Commission may return any Application if the necessary particulars are not furnished along with the Application, unless specific relaxation is sought and granted by the Commission.
- 5.3 If the Transmission Scheme is removed from the STU Plan or modified for any reason, then the in-principle approval granted by the Commission to the Scheme, if any, shall be considered as null and void.
- 5.4 The Capex Schemes proposed by SLDC shall clearly indicate funding through utilisation of Load Despatch Centre Development (LDCD) Fund and balance funding through debt or equity or grants, as applicable.
- 5.5 The Applicant shall be responsible for obtaining all applicable clearances and approvals, and financial impact of any delay in obtaining the necessary clearances shall be dealt with appropriately by the Commission.
- 5.6 The Application for in-principle approval of Capital Investment shall be submitted in

accordance with the Format specified in **Appendix 1**:

Provided that the Format may be modified by the Commission from time to time, as required:

Provided further that the Commission may ask the Applicant at any stage of the approval process to submit any other relevant information for undertaking the Prudence Check of the proposed capital investment.

- 5.7 The following criteria shall have to be satisfied for Capex Schemes proposed for technology upgradation and improvement at significantly higher cost:
 - a. Significant operational difficulties with the existing assets leading to frequent disruption of operations and/or supply;
 - b. The Useful Life of the asset proposed to be upgraded should have either been exhausted or significantly completed as validated by residual life test/diagnostic test results, and not merely because of completion of Useful Life;
 - c. Cost benefit analysis should justify the asset upgradation:

Provided that in case the Applicant submits Capex Scheme for technology upgradation and improvement despite above specified criteria not being satisfied, then the cost of the Capex Scheme shall be recovered directly from the Local Authority governing the area/consumers / beneficiaries, etc., that shall benefit from the Capex Scheme and shall not be socialised across the licence area:

Provided further that the consent of the concerned Local Authority for recovery of the cost of the Capex Scheme shall be submitted along with the DPR Scheme for in-principle approval of the Commission.

- 5.8 Revised in-principle approval of Capital Investment may be accorded by the Commission in case an Applicant files an Application for the same, only under exceptional circumstances related to land unavailability for the Scheme or feasibility of the Scheme being adversely affected due to force-majeure events.
- 5.9 Revised in-principle approval may be sought only after exceeding ninety (90) percent of the originally approved cost of the Scheme.
- 5.10 Revised in-principle approval may be granted only for change in scope of work due to site conditions and not change in rates.
- 5.11 If the variation between actual cost and approved cost is within 10% of the approved cost, then the variation shall be absorbed by the Applicant.
- 5.12 The Applicant shall submit all the necessary documents and justification for the request for revised in-principle approval as may be sought by the Commission.

5.13 Revised in-principle approval shall not be accorded more than once for any Scheme under any circumstances.

6. Application for Approval of Completed Cost of DPR Schemes

The approval of completed cost of all the DPR Schemes completed before filing the claim for true-up for any financial year along with the appropriate Petition as specified in Regulation 4.9 shall be sought in a combined manner and shall necessarily comprise the following particulars for each Scheme:

- (1) Name and Reference number of Scheme along with date of in-principle approval by the Commission;
- (2) Whether the stated objectives of the Scheme as submitted in the Application for inprinciple approval have been achieved, and justification for variation in the same.

(3) Technical Parameters

- a. Date of asset being 'put to use' along with Certificate of Electrical Inspector or authorised officer of Distribution Business/Licensee, as applicable;
- b. Comparison of year-wise loading of asset since the date of being put to use with year-wise loading proposed in the Application for in-principle approval;
- c. Bills of Quantity actually used vis-à-vis quantity claimed in the application for inprinciple approval, with break-up of number of units and per unit cost, and justification for the variation in quantity, if any;
- d. Justification for change in scope of work with respect to the original scope of work approved in-principle by the Commission, including changes in specification of assets, if any, and cost implication due to the change if higher than 10% of the approved cost;
- e. Variation with respect to scheduled completion date, reasons and justification for the delay, if any, inter-alia, technical parameters, constraints, controllable and uncontrollable factors, mitigation measures adopted by the Applicant, and confirmation that these factors had been highlighted at the time of seeking inprinciple approval;
- f. Physical Completion Certificate (PCC) issued by technical officer of Applicant, duly authorised by the competent authority;
- g. Impact on operational performance on account of delay in execution of works, if any;
- h. Final route survey report in case of Transmission Business/Licensee, and justification for deviation from route proposed in the application for prior approval, if any, in case of cost increase higher than 10% of the approved cost;
- i. Detailed comparison of the scope and cost approved by the Commission vis-a-vis that actually incurred by the Applicant with justification for deviations.

(4) Financial Parameters

- a. Item-wise justification for variation between approved equipment cost and completed cost, if any, in case of cost increase higher than 10% of the approved cost;
- b. Difference between approved and actual year-wise phasing of capital investment and capitalisation;
- c. Justification for increase in Interest During Construction (IDC), if any, with respect to IDC approved by the Commission in the in-principle approval;
- d. Confirmation that the asset has been capitalised in the annual accounts of the entity, along with the date of asset capitalisation, as reflected either in the Asset Register or ERP system;
- e. Justification for variation in funding through debt or equity or grants, if any, with respect to that proposed in the Application for in-principle approval;
- f. Financial Completion Certificate (FCC) issued by competent officer of Applicant, duly authorised by the competent authority;
- g. Comparison of actual cost benefit analysis with respect to cost benefit analysis proposed at the time of in-principle approval and justification for variation, if any;
- h. Impact on financial performance on account of delay in execution of works, if any;
- i. Impact of commissioning of asset on retail tariff after considering actual completed cost;
- j. Copy of the verification of the land cost issued by the District Revenue Authority, if the land was acquired post in-principle approval of the scheme:
 - Provided that if excess land is acquired without adequate justification, then the Commission may allow the cost of the necessary land only.

7. Submission of Rolling Capital Investment Plan

- 7.1 All Generating Business/Companies, Transmission Business/Licensees, Distribution Business/Licensees and MSLDC shall submit a five-year Rolling Capital Investment Plan for the next five financial years, within three (3) months of notification of these Regulations.
- 7.2 The Rolling Capital Investment Plan may be updated annually on or before April 30th of every financial year and shall be uploaded on Applicant's/STU's website.
- 7.3 The Rolling Capital Investment Plan of Transmission Business/Licensees shall be consistent with the five-year Rolling Plan prepared by STU.
- 7.4 The Rolling Capital Investment Plan for the first three years shall be a concrete Plan and no changes shall be made in the same to the extent of addition of new schemes, though unnecessary schemes can be excluded.
- 7.5 If there are changes in the schemes/scope envisaged in the Rolling Plan for the fourth and

fifth year, then the Applicant has to give the justification for such changes:

Provided that only incremental changes shall be considered by the Commission for the fourth and fifth year based on the justification to be submitted by the Applicant, and complete revamp/modification of the Rolling Capital Investment Plan is not envisaged:

Illustration: Original Rolling Capital Investment Plan comprises 10 Transmission Schemes including 4 x 220 kV Sub-stations, 6 x 132 kV Sub-stations, and 750 km of 220 kV/132 kV transmission lines; due to re-routing and land acquisition issues, the revised Rolling Capital Investment Plan may factor changes to length of transmission lines; however, revision in the number of 220 kV and 132 kV Sub-stations or location changes are not envisaged.

- 7.6 The Rolling Capital Investment Plan shall bear in mind the previous trend in capital investment.
- 7.7 The Rolling Capital Investment Plan shall neither be approved in-principle by the Commission, nor shall it be construed as approved by the Commission.
- 7.8 Adverse inference may be drawn regarding the Capital Investment Schemes of the Applicant in case of non-submission of Rolling Capital Investment Plan as per the above schedule.

8. Prudence Check for In-Principle Approval of DPR Schemes

- 8.1 The Commission shall undertake Prudence Check of the Application submitted for inprinciple approval of DPR Schemes based on the submissions made by the Applicant in accordance with Regulation 5 of these Regulations.
- 8.2 The Prudence Check for in-principle approval of DPR Schemes shall comprise detailed scrutiny of the following parameters inter-alia:
 - (1) Whether the Applicant has submitted all the essential data, justification and documentary evidence, as specified in Regulation 5;

(2) Technical Evaluation criteria

- a. Whether the proposed Capex falls under the Categorisation of DPR Schemes specified in Regulation 3;
- b. Background, necessity, objectives, and overall suitability of proposed Capex;
- c. Whether the Scheme will result in quantifiable and verifiable benefits;
- d. Approval of authorised representative of the Company;
- e. The Single Line Diagram (SLD) for the proposed Schemes and Grid maps of relevant areas, duly differentiating with the existing Schemes;
- f. The in-feed arrangements for various Schemes along with the letter of

- confirmation for the in-feed from the concerned agencies;
- g. The feasibility of availability of land and/or right of way approvals for the Scheme and methodology proposed for acquiring the same;
- h. The Bill of Quantity estimated by the Applicant;
- i. PERT Chart showing completion stages and alternative plan for delays;
- j. Whether proposed Transmission Scheme fits into CEA's overall system planning study for the State of Maharashtra and is included in the Rolling capital Investment Plan of the Applicant and the five-year STU Plan;
- k. Whether it meets the demand projections for the period of five years from the date of commissioning of the scheme;
- 1. Whether the Scheme is necessary to discharge the duties and obligations of the Applicant as per the Act or to meet any other statutory or safety requirement;
- m. Whether all possible alternatives to the proposed Capex have been submitted by the Applicant including assessment whether such works can be carried out under Opex Scheme or O&M budget;
- n. Efforts taken by the Applicant to optimise the project cost;
- o. In case proposed DPR is for asset replacement after completion of regulatory Useful Life, the Commission shall scrutinise the following aspects before according approval:
 - i. Whether the completion of regulatory Useful Life has adversely affected the performance of the asset;
 - ii. Whether the assets are beyond repair;
 - iii. Whether performance of the asset can be brought to the desired level through repairs or Renovation and Modernisation;
 - iv. Residual Life Test to assess the real residual life of the asset parameters;
 - v. Interruptions/faults/issues that have occurred in the last five years on the asset;
 - vi. Results of the diagnostic testing of the equipment/material and their analysis;
 - vii. Past major R&M of the asset;
- p. Structural audit report of existing civil structure in case of replacement of civil structure;
- q. Load flow study report in case of setting up of Sub-stations, Transmission Lines, Distribution network;
- r. Whether all possible constraints have been realistically envisaged and mitigation measures proposed;
- s. Impact if the proposed Capex is either not carried out or is deferred for some period;
- t. Proposed framework for implementation and periodic monitoring of the Scheme;
- u. Requirement of third-party verification on case-to-case basis, if considered

- appropriate by the Commission.
- v. Demand/Requirement of the Distribution Business/Licensees/consumers in case of Transmission Schemes.

(3) Financial Evaluation criteria

- a. Cost estimates derived based on rates of components available in the Standard Cost Sheet to be maintained by the respective Transmission Business/Licensees and Distribution Business/Licensees, and justification provided by Applicant in case of variation with respect to the Standard Cost Sheet;
- b. Other costs considered by the Applicant;
- c. For Generation Business/Companies and for new works of Transmission Business/Licensees and Distribution Business/Licensees, which are not present in the Standard Cost Sheet, estimated cost based on least of the quotations received from vendors;
- d. In case of deposit work, the letter from respective agency/consumer for such purpose and cost sharing arrangements between the development agencies and the Licensees;
- e. In case of works to be partially funded by Grants, whether the approval of respective Government for the same has been submitted;
- f. Whether the proposed Capex is the Least Cost Option;
- g. Cost Benefit Analysis of all possible alternatives;
- h. Proposed funding for the Scheme;
- i. Impact of proposed DPR on retail Tariff.

9. Prudence Check for Approval of Completed Cost of DPR Schemes

- 9.1 The Commission shall undertake Prudence Check of the completed cost of all the DPR Schemes based on the submissions made by the Applicant in accordance with Regulation 6 of these Regulations.
- 9.2 The Prudence Check for approval of the completed cost of DPR Schemes shall comprise detailed scrutiny of the following parameters inter-alia:
 - (1) Whether the Applicant has submitted all the essential data, justification and documentary evidence, as specified in Regulation 6;
 - (2) Whether the DPR Scheme has received the Commission's in-principle approval or is exempted from obtaining in-principle approval on account of being a 100 percent Grant funded Schemes;
 - (3) Whether the stated objectives of the Scheme as submitted in the Application for inprinciple approval have been achieved;
 - (4) Whether the asset has been 'put to use' and is benefiting the consumers/system;
 - (5) Variation in the scope of work with respect to the original scope of work approved in-principle by the Commission

- (6) Variation in the quantities actually used with respect to the quantities considered in the DPR Scheme;
- (7) Variation between approved equipment cost and completed cost, and phasing of capital investment;
- (8) Whether the Applicant has adopted industry best practices for minimising the incidence of income tax while executing the capital expenditure;
- (9) Variation with respect to scheduled completion date and justification thereof, and impact of delay in completion, if any, including impact on Interest During Construction (IDC) and inflation on the cost of the entire project;
- (10) Date of asset capitalisation in the annual accounts of the entity;
- (11) Variation in the funding of the capital investment;
- (12) Whether the stated objectives of the Scheme as submitted in the Application for inprinciple approval have been achieved;
- (13) Actual cost benefit analysis, utilisation index of the assets;
- (14) Impact of commissioning of asset on retail tariff after considering actual completed cost;
- (15) Study of Cost Audit Report for selected Capex Schemes, as desired by the Commission;
- (16) Requirement of third-party verification on case-to-case basis, if considered appropriate by the Commission.
- 9.3 If the in-principle approval has not been obtained for the Capex Scheme in accordance with Regulation 4.2 or if the Applicant is unable to establish the benefits as submitted in the Application for in-principle approval either fully or partly, the Commission may either disallow the capitalisation claimed against the respective DPR Scheme, in part or in full, as appropriate, or allow lower Return on Equity on such investment, as may be specified in the applicable MERC (Multi-Year Tariff) Regulations:
 - Provided that in case the actual benefits of the Scheme are greater than the benefits considered at the time of in-principle approval, no sharing of gains shall be allowed to the Applicant.
- 9.4 The Cost Benefit Monitoring of selected Capital Investment Schemes shall be done by the Commission on an on-going basis as considered appropriate by the Commission.
- 9.5 The amount of capitalisation claimed in the True-up Petition against DPR Schemes shall match with the respective Completion Reports submitted by the Applicant in accordance with Regulation 16:
 - Provided that mismatch between amount of capitalisation claimed in the True-up Petition with the capitalisation reported in the Completion Reports may lead to disallowance of part or complete capitalisation.

10. Prudence Check for Approval of Completed Cost of Non-DPR Schemes

- 10.1 The Final approval of completed cost of Non-DPR Schemes after asset is put to use shall be sought along with the claim for true-up for any financial year filed along with the appropriate Petition for approval of Multi-Year Tariff or Mid-Term Review, in accordance with the MERC (Multi-Year Tariff) Regulations applicable at that point in time.
- 10.2 The Prudence Check for approval of the completed cost of Non-DPR Schemes shall comprise detailed scrutiny of the following parameters inter-alia:
 - (1) List of Non-DPR schemes with details of works undertaken, amount capitalized, justification for undertaking the works, and cost benefit analysis;
 - (2) Whether the Non-DPR assets have been put to use or are forming part of the inventory;
 - (3) Whether the Non-DPR capitalisation is with respect to replacement of old assets;
 - (4) Whether the Non-DPR capitalisation is relating to Other Business of the Applicant;
 - (5) Whether such Non-DPR Schemes fall under Opex Schemes or O&M activities;
 - (6) Benefits achieved after execution of the Non-DPR scheme;
 - (7) Requirement of third-party verification on case-to-case basis, if considered appropriate by the Commission.
- 10.3 The Commission shall allow Non-DPR capitalisation based on the prudence check, subject to the cap against Non-DPR capitalisation specified in the MERC (Multi-Year Tariff) Regulations, 2019, as amended from time to time:
 - Provided that if the Non-DPR capitalisation does not meet the specified criteria then the Commission shall not allow the capitalisation of such scheme.

11. Capital Investment by Distribution Business/Licensee under Parallel Licensee Scenario in Mumbai Suburban Distribution Licence Area

- 11.1 In the Mumbai suburban distribution licence area supplied electricity by Adani Electricity Mumbai Limited and The Tata Power Company Limited, and where both Distribution Business/Licensees have existing distribution network either partly or fully covering the licence area through Distribution Mains, the capital investment required for connecting to new consumer shall be optimised in the manner specified in these Regulations.
- 11.2 The preferred Distribution Business/Licensee for setting up distribution network to connect to the consumer shall be identified in accordance with the following four (4) Scenarios as well as Levels specified in Regulation 11.3:

Scenario	Spread of Distribution Network of	Preferred Distribution
	Respective Distribution	Business/Licensee for setting up
	Business/Licensee	distribution network to connect to
		the consumer
Scenario 1	Licensee A completely covers the locality	Licensee A
	with Distribution Mains and Licensee B	
	does not completely cover with	
	Distribution Mains	
Scenario 2	Licensee A and Licensee B both	Licensee A or Licensee B shall connect
	completely cover the locality with	by extending service lines, depending
	Distribution Mains	on choice of new consumer
Scenario 3	Licensee A and Licensee B both do not	Network development by Licensee A
	have distribution network in the locality	or Licensee B, depending on choice of
		new consumer
Scenario 4	Licensee A and Licensee B both have	Network development by Licensee A
	distribution network in the locality but	or Licensee B, depending on
	have not completely covered with	comparative capital cost to connect to
	Distribution Mains	new consumer

- 11.3 The various Levels to be considered for selecting the preferred Distribution Business/Licensee for setting up distribution network to connect to the consumer to be considered under Scenario 4 specified in Regulation 11.2 are as under:
 - a. Level 1: Connection to LT consumer or HT consumer is possible by extending the service line and/or Distribution Sub-Station from the existing LT or HT Distribution Mains, respectively, without any extension or augmentation, considering the distance, presence, proximity, and vicinity of both the Distribution Business/Licensees;
 - b. **Level 2:** Connection to LT consumer is possible only after augmentation or extension of the nearest LT Distribution Mains considering the network spread, distance, presence, proximity, and vicinity of both the Distribution Business/Licensees;
 - c. **Level 3:** Connection to LT consumer is possible only after providing new Consumer Sub-station (CSS) or augmenting the existing CSS;
 - d. **Level 4:** Connection to LT consumer or HT consumer is possible only after laying or augmenting HT cable or HT mains and associated switchgear;
 - e. **Level 5:** Connection to LT consumer or HT consumer is possible only after laying or augmenting the HT cable or HT mains and associated switchgear, and commissioning of new or augmentation of the existing Distribution Sub-Station (DSS) or Receiving Station in the area.

Adani Electricity Mumbai Limited and The Tata Power Company Limited, and where both Distribution Licensees have existing distribution network either partly or fully covering the licence area through Distribution Mains shall be submitted to the Mumbai Distribution Network Assessment Committee (M-DNAC) set up by the Commission for scrutiny of such proposals, in accordance with the mechanism specified in Regulations 11.6 to Regulation 11.15.

11.5 The M-DNAC shall have the following composition:

- (a) One or more technical officers of the Commission not below the rank of Dy. Director (Technical), one of whom shall convene and chair meetings of the M-DNAC;
- (b) One or more external members with technical competence, of whom at least one shall be conversant with electricity distribution and/or consumer issues, and may include an Authorised Consumer Representative.
- 11.6 The Distribution Business/Licensee to whom the consumer has applied for connectivity shall identify the Scenario as specified in Regulation 11.2 and Level as specified in Regulation 11.3 under which the present case is to be dealt with and accordingly propose to take up the work for laying of distribution network.
- 11.7 In cases qualifying under Level 1 and Level 2 as specified in Regulation 11.3, the concerned Distribution Business/Licensee to whom the consumer has applied for connectivity shall set up the required distribution infrastructure and intimate the M-DNAC accordingly.
- 11.8 In cases qualifying under Level 3 to Level 5 as specified in Regulation 11.3, the concerned Distribution Business/Licensee to whom the consumer has applied for connectivity shall submit its proposal to the M-DNAC for approval of cost estimates for installing the distribution network.
- 11.9 Based on the application of the Distribution Business/Licensee, M-DNAC shall scrutinize the submission and accordingly categorize the application under appropriate Scenario and Level, considering the network spread, distance, presence, proximity, and vicinity of both the Distribution Licensees.
- 11.10 If the case falls under Level 3 and above as specified in Regulation 11.3, M-DNAC shall call for proposal from the parallel Distribution Licensees, for assessing the least cost mechanism for setting up distribution network:

Provided that the proposal for laying of distribution network in parallel licensee area shall be submitted by the Distribution Business/Licensees based on standard technical specifications related to loading and diversity factor, as may be stipulated by M-DNAC from time to time, and the capital cost shall be computed accordingly.

- 11.11Upon receipt of the proposals, M-DNAC may consult either or both Licensees for any clarifications it may require.
- 11.12 Based on the proposals received from the parallel Distribution Licensees, M-DNAC shall decide on which Distribution Business/Licensee is preferred to set-up the network for the present case based on the capital cost of the alternative proposals:

Provided that the estimated cost of the required works involved in the proposal submitted to the M-DNAC shall be final, and will be considered as the ceiling cost for the purposes of the concerned Licensee's ARR.

- 11.13 In cases qualifying under Scenarios 1 to 3 as specified in Regulation 11.2, the concerned Distribution Business/Licensee to whom the consumer has applied for connectivity shall submit to the M-DNAC details of the applications it is considering for new connections at Levels 3 to 5 in areas identified by it as falling under Scenarios 1 to 3, with a copy to the other Licensee.
- 11.14 The M-DNAC shall verify that the area categorisation by the Licensee is correct:

Provided that if it is not disputed by the other Licensee, the M-DNAC may dispose of the reference accordingly without any further verification and the concerned Licensee may proceed accordingly:

Provided further that if the claimed categorisation is disputed and found to be incorrect, the M-DNAC shall inform the concerned Licensee, who shall deal with the application in accordance with the dispensation applicable for the category determined by the M-DNAC:

Provided also that considering the limited nature and purpose of the evaluation required, the M-DNAC shall dispose of such references on priority.

- 11.15 The decisions of the M-DNAC shall be uploaded on the websites of the Commission and the concerned Licensees.
- 11.16 In case of any dispute regarding the decision of M-DNAC in this regard, the Distribution Business/Licensees may approach the Commission for adjudication.

12. Capital Investment in Projects set up through Competitive Bidding under Section 63 of the Act

- 12.1 These Regulations shall not normally be applicable for capital investment undertaken in Projects set up through Competitive Bidding under Section 63 of the Act:
 - Provided that Final approval may be sought for capital investment undertaken in such projects only in cases where the capital investment has been undertaken under specific conditions of Force Majeure Event or Change in Law and there is a dispute between the beneficiary and the Project Developer on the same:
- 12.2 The Prudence Check of capital investment undertaken in such Section 63 projects shall be done by the Commission on application by the Applicant under Regulation 12.1 in accordance with the framework specified in these Regulations.
- 12.3 The additional expenditure approved for such capital investment shall be appropriately allowed to be recovered as additional Tariff over and above the Tariff discovered through competitive bidding, and shall not be added to the capital cost of the Project:
 - Provided further that the above recovery of approved additional expenditure through tariff shall be proportionately allowed only for the balance period of Power Purchase Agreement or Transmission Service Agreement as applicable and not for the entire Useful Life of the concerned asset.

13. Approval of Overhead Charges as part of Capital Cost

- 13.1 In the in-principle approval of DPR Schemes, the Commission may allow Contingency expenses of maximum 3 per cent of capital cost, which shall be subject to true-up at the time of approval of completed cost based on head-wise justification to be submitted by the Applicant.
- 13.2 The Commission shall not normally consider any other Overheads beyond the ceiling allowed for Contingency expenses:
 - Provided that the Applicant may claim other Overheads beyond the above-specified ceiling with adequate justification along with the necessary supporting documents for the consideration of the Commission.
- 13.3 Variation in Road Re-instatement (RI) Charges and Right of Way (RoW) Compensation with such costs considered in the in-principle approval shall be allowed separately, based on adequate justification to be submitted by the Applicant:
 - Provided that variation in RI Charges for same location/part location due to inadequate planning may be disallowed.

14. Treatment of Time Overrun in Capex Schemes

- 14.1 Capex Schemes shall be planned considering a maximum time horizon of 5 years for Generation Business/Companies and Transmission Business (including MSLDC)/Licensees and 4 years for Distribution Business/Licensees.
- 14.2 In its Application for approval of DPR, the Applicant shall provide for all expected delays and the expected increase in time for execution of projects due to such expected delays, which are beyond the control of the Applicant.
- 14.3 At the time of approval of completed cost, the Commission shall consider only those delays identified in the DPR Scheme by the Applicant:
 - Provided that the Commission may consider any delay in execution of the Scheme for reasons attributable to Force Majeure or Change in Law.
- 14.4 In case of delay in completion of the Capex Scheme beyond the schedule considered in the in-principle approval, the Commission shall adopt the following methodology for allowing excess Interest During Construction (IDC) on account of delay in completion of the Scheme, at the time of approval of completed cost:

Period of Delay (Percentage of original	Percentage Disallowance of excess
Scheduled Completion Period)	IDC
1% - 20%	10%
21% - 40%	25%
41-60%	40%
60%-80%	75%
Above 80%	100%

- 14.5 The matrix specified in Regulation 14.4 shall be applicable for all Schemes that achieve completion after the notification of these Regulations, irrespective of whether the Scheme commenced before the notification of these Regulations:
 - Provided that the total time taken for completion shall not normally exceed the maximum time horizon for Capex Schemes specified in Regulation 14.1:
- 14.6 The Commission may allow additional Interest During Construction (IDC) if the total time taken for completion is beyond the above specified time horizon on account of reasons attributable to Force Majeure or Change in Law.
- 14.7 Provided also that in case of delays due to receipt of Right of Way (RoW) clearances, evidence of timely action taken as per the provisions of the Section 67 of the Act and the

- Maharashtra Electricity Works of Licensees Rules, 2012 shall be submitted by the Applicant.
- 14.8 In addition to the disallowance of entire or part of the excess IDC as specified in Regulation 14.2, the Commission may also consider any other form of financial penalty as may be specified in the applicable MERC (Multi-Year Tariff) Regulations.

15. Treatment of Cost Overrun in Capex Schemes

- 15.1 The capital cost of the DPR Scheme, as approved in-principle by the Commission in accordance with these Regulations, shall act as ceiling capital cost and the Generating Business/Company or Transmission Business/Licensee or Distribution Business/Licensee or MSLDC shall accordingly execute the works proposed in the DPR Scheme.
- 15.2 The Applicant shall furnish the details of variance in capital cost and justification for the variance with respect to capital cost approved in-principle by the Commission, at the time of seeking approval for the completed cost.
- 15.3 If the reasons for the increase in capital cost are found to be beyond the control of the Applicant, the Commission may consider the increase in capital cost.
- 15.4 The Commission shall consider the cost overrun of the equipment cost with respect to the capital cost approved in-principle by the Commission only to the extent of the work award cost, subject to the condition that the works have been awarded on the basis of competitive bidding in accordance with these Regulations.
- 15.5 The Commission shall not allow cost overrun in the equipment cost over and above the award cost, as the treatment of cost deviation with respect to the award cost shall be addressed under the execution contract with the equipment supplier or EPC contractor, as applicable:

Provided that the Commission may consider cost overrun in the following cases:

- a. Change in scope of work due to circumstances beyond the control of the Applicant;
- b. Quantity variation depending on adequate justification being provided by the Applicant.
- 15.6 The Commission may verify whether the quantity for a particular Scheme is in line with the actual quantity utilised for a Scheme of similar nature undertaken by the Applicant in the past.
- 15.7 If the actual scope of work or quantity for a particular Scheme is lower than the scope of work or quantity, respectively, considered at the time of in-principle approval, then the actual scope of work and quantity shall be considered and proportionate capital cost shall

- be compared with the approved cost, for identifying whether there has been any cost overrun.
- 15.8 The negligence of the Applicant, failure of the contractor to execute the work, or bankruptcy of the contactor of the Applicant or project implementing agency shall not be treated as circumstances beyond the control of the Applicant.
- 15.9 Right of Way (RoW) issues or delay in obtaining statutory clearances claimed without timely action by the Applicant as per the provisions of the Act and Maharashtra Electricity Works of Licensees Rule, 2012, State Government Order/notification, etc., shall not be treated as circumstances beyond the control of the Applicant.
- 15.10The Generating Company or Licensee shall follow prudent contract practice by incorporating necessary safeguard clauses against risk of price increment on account of Foreign Exchange Rate Variation (FERV) on imported material.
- 15.11Any extra rupee liability towards FERV on import of material may be disallowed as may be specified in the applicable MERC (Multi-Year Tariff) Regulations.

16. Pre-requisites for undertaking Capex Schemes

All Capex Schemes shall fulfil the below specified pre-requisites for being considered at the time of approval of completed cost:

- a. Procurement of equipment or turnkey contracts shall be done through open Competitive Bidding only, in accordance with the Guidelines specified at **Appendix 2**, and the Applicant shall be required to submit documentary evidence of the same at the time of submission of completed cost;
- b. In case the winning bidder in the competitive bidding process is a Sister Concern or Group Company of the Generating Business/Company or Transmission Business/Licensee or Distribution Business/Licensee, prior approval of the Commission shall be taken before awarding the project;
- c. If the Applicant fails to initiate the work, including tendering process, within a period of one year or as stipulated by the Commission, from the date of receipt of in-principle approval, the in-principle approval shall be deemed to be cancelled;
- d. The Applicant shall provide regular updates on half-yearly basis on status of implementation of all Capex Schemes that have received the in-principle approval of the Commission with respect to the PERT Chart submitted along with the Application for in-principle approval, at the end of the month of September and March of every year, through the web-based portal being developed by the Commission for this purpose and in physical form and email till the web-based portal is operationalised as well as if the web-based portal is not functional for any reason;
- e. Along with the half-yearly update, the Applicant shall furnish to the Commission the Completion Report of the Schemes put to use in the latest six months with details of item-

- wise actual cost incurred, escalation in cost, if any, with reasons, the scope and objectives of the Scheme and to extent to which these have been achieved, etc., in accordance with the Format specified in **Appendix 1**;
- f. Assets put to use after execution of the Capex Scheme shall be added to the Asset Register of the entity;
- g. The Applicant shall utilise spares as per availability with a view to optimise the capital cost:
- h. The inter-connected entities should ensure that the upstream/downstream network is created as per the optimised scheduled to avoid stranding of assets:

Provided that the onus of compliance with above pre-requisites lies on the Applicant and non-compliance may lead to partial/full disallowance of capital cost, as considered appropriate by the Commission.

17. Standard Cost Sheet to be maintained by the Transmission Business/Licensees and Distribution Business/Licensees

- 17.1 Distribution Business/Licensees shall prepare and submit the Standard Cost Sheet to the Commission within three (3) months of notification of these Regulations, for all capital items procured by them based on latest rates discovered through competitive bidding with the supporting documents, which may be validated by Officers of the Commission.
- 17.2 Transmission Business/Licensees shall submit the Standard Cost Sheet for all capital items procured by them based on latest rates discovered through competitive bidding, to the State Transmission Utility (STU) for validation within two (2) months of notification of these Regulations.
- 17.3 STU shall forward the validated Standard Cost Sheet for each Transmission Business/Licensee to the Commission within three (3) months of notification of these Regulations.
- 17.4 Transmission Business/Licensees and Distribution Business/Licensees shall update the Standard Cost Sheet annually by 31st May based on the latest discovered rates and submit the same to the STU and Commission, respectively:
 - Provided that the STU shall validate the periodic submissions of the Transmission Business/Licensees and forward validated Standard Cost Sheet to the Commission within one (1) month of receipt of the updated Standard Cost Sheet from the Transmission Business/Licensees.
- 17.5 The Standard Cost Sheet shall be the reference document for estimation of item-wise capital cost by the Applicant while seeking in-principle approval of DPR Scheme.
- 17.6 For items not listed in Standard Cost Sheet, the Applicant shall provide budgetary

- quotations from multiple vendors for estimation of capital cost of such items or procurement costs for earlier periods as a reference.
- 17.7 The Applicants shall ensure that Standard Cost Sheet is maintained for the major equipment contributing to around 60 percent to 70 percent of the total Scheme cost, comprising inter-alia, cables, conductors, transformers, meters, transmission towers, switchgears, etc.
- 17.8 If the Applicants do not submit the updated Standard Cost Sheet, the Commission shall approve the Scheme as per the available Standard Cost Sheet without any escalation:
 - Provided that the cost data in the Standard Cost Sheet shall not be more than two years old.

18. Role of STU in Capex Schemes for Transmission Business

- 18.1 STU shall perform all the activities mandated under the Act and Regulations notified by the Commission including the State Grid Code as amended from time to time and the MERC (Multi-Year Tariff) Regulations, 2019, as amended from time to time.
- 18.2 The STU shall prepare the rolling five-year Plan for the State of Maharashtra in accordance with the State Grid Code as amended from time to time and provide technical and financial justification for all the proposed Capex Schemes to be carried out in the next 5 years of the STU plan, in the submission to the Commission.
- 18.3 The STU Plan shall be based on a holistic view, duly taking into account capital investment schemes already proposed as well as Schemes taken up in nearby areas in the past.
- 18.4 The Transmission Business/Licensees, viz., Maharashtra State Electricity Transmission Company Limited (MSETCL), The Tata Power Company Limited Transmission (TPC-T), and Adani Electricity Mumbai Limited Transmission (AEML-T) shall send capital cost estimates to STU for the Capex Schemes that they desire to take up, out of the Capex Schemes proposed in the STU Plan.
- 18.5 The STU may either permit the Transmission Business/Licensee with the lowest capital cost to take up the concerned Capex Scheme under Section 62 of the Act or recommend the Capex Scheme to be taken up through Tariff Based Competitive Bidding (TBCB) under Section 63 of the Act.
- 18.6 STU shall be responsible for any changes proposed in the STU Plan and shall submit proper justification for such changes to the Commission:
 - Provided that the STU Rolling Plan may be revised annually, subject to adequate justification being submitted by the STU.

- 18.7 The Rolling Capex Plan prepared by the Transmission Business/Licensee shall be in sync with the STU Plan.
- 18.8 No Capex Scheme submitted by any Transmission Business/Licensee shall be considered by the Commission for in-principle approval unless the Scheme is part of the STU Plan and has been validated by the STU technically and financially.
- 18.9 The STU shall validate the Standard Cost Sheet for each Transmission Business/Licensee and forward the same to the Commission within three (3) months of notification of these Regulations, as well as validate the periodic updates of the Standard Cost Sheet, which shall be forwarded to the Commission within one (1) month of receipt of the updated Standard Cost Sheet from the Transmission Business/Licensees.

19. Web-based Portal for Submission and Periodic Updates of DPR Schemes

- 19.1 The Applicant shall submit the DPR Schemes with all supporting documents in the formats specified in **Appendix 1** for the Commission's approval through the web-based portal being developed by the Commission for this purpose and in physical form till the web-based portal is operationalised:
 - Provided that one physical copy shall always be submitted for the Commission's records.
- 19.2 In accordance with Regulation 16 of these Regulations, the Applicant shall provide regular updates on half-yearly basis on status of implementation of all Capex Schemes that have received the in-principle approval of the Commission, at the end of the month of September and March of every year, through the web-based portal being developed by the Commission for this purpose and in physical form till the web-based portal is operationalised as well as if the web-based portal is not functional for any reason.

20. Power to Relax

The Commission may, by general or specific Order, for reasons to be recorded in writing and after giving an opportunity of hearing to the Parties likely to be affected, relax any of the provisions of these Regulations on its own motion or on an application made before it by an interested person.

21. Issue of Order and Practice Directions

Subject to the provisions of the Act, the Commission may from time-to-time issue Orders and Practice Directions with regard to the implementation of these Regulations.

22. Power to Amend

The Commission may, at any time, vary, alter, modify or amend any provisions of these Regulations.

23. Power to remove difficulties

If any difficulty arises in giving effect to the provisions of these Regulations, the Commission may, by general or specific Order, make such provisions, not inconsistent with the provisions of the Act, as may appear to be necessary for removing the difficulty.

Mumbai

Dated: 14 March, 2022

(Abhijit Deshpande)
Secretary,
Maharashtra Electricity Regulatory Commission

APPENDIX 1:

Format for Filing of Capital Investment Scheme for In-Principle Approval

1. PART I (Particulars to be furnished in the Overview of the DPR)

1. Index	Index with the documents Page No.
2. Name of Applicant	(Name of the Utility proposing the capex/DPR)
3. Name of the Capital Investment Work	(E.g. Construction of 400/220kVSubstation at, Construction of220kV Transmission line at)
4. Nature of capex Scheme (New/Resubmitted / revised / modified (/ extended)	Whether the present DPR was earlier referred back/cancelled with any specific directions? If yes, whether the previous conditions are satisfied. The detailed chronology of the events is added or not Detailed reasoning for resubmission/ revision/ modification/ extension is submitted or not
5. Details of the Location	(Name of Zone, Circle/Area/Location) along with GPS Co-ordinates
6. Date of Approval by Competent Authority designated by the Board of Directors of the Company	(Documentary Proof to be furnished)
7. Category of DPR	(Under which of the categories specified in the Regulations does the capital work fall under)
7. Category of DPR8. Objective of the Capital Investment	
	in the Regulations does the capital work fall under) (Overall objective of the work - like system strengthening, system augmentation, replacement of assets, Renovation & Modernization,

11.State Map Location (For Transmission)	Map is synchro	onized with U surrounding a	ention) Project loc pdated web site sset (functional n State Map.**	State
12.Brief Scope and Specifications of Work	(E. ii) 400/220kV tiii) 220kV cable	ransformer 2x2	cable km;	
13.Any Reference of Study Report / recommendations of OEM/Expert	Plan, Load Flow Expert Agenc Recommending	w Study, Recory, Report of Committee/Ar	port, EPS Report, mmendations Report f OEM/Third F my report by comp orks is proposed to	ort of Party/ petent
14.Estimated cost	Rs (Hard Rs (Total	11	ng details) and Contingency)
15.Time Frame of the expenditure	Completion Per	riod months		
	Year	Capex (Rs.)	Capitalization (Rs.)	
	1 (FY			
	2 (FY)			
	3 (FY)			
16.Funding arrangement	Source of Funds	Amount (Rs.)	Share (%)	
	Debt			
	Equity Grants			
	Consumer Contribution/			

	Deposit			
	Works			
	TOTAL		100%	
	expected with e	case of fundation to be provided is as per Suppleroof of infusion through Internation	t rate) partially grant ioned along we documentary partially grant ioned along we documentary partially through led that the world y Code/SOP etc. of Equity if a	funded with the proof of deposit k which c.)
17.Benefits/Impact	period of ye	reduction in I eduction in SHR I sale of energy on of the system rastructure — vill get load relie y addition will So, if no sudde	Loss over a perform to to for MW. The not require in growth is of	hus, S/s next
	addition even the B. System (name)	ng additional in will not be find ough executed e Improvement will be reduced of Benefit (qua	ancially added in arlier) W VR of to	in ARR
18.Overall cost-benefit analysis	impact with ab	capital cost & ove benefits, and IRR, NPV, oth ssment, etc.	nd analysis in to	erms of

- ** STU / MSETCL must prepare Map of complete InSTS every year showing all existing and proposed infrastructure in Map as per the plan updated every year. Position for Proposed scheme must be properly marked on the State Map. In case of any instantaneous proposal, STU / MSETCL must update the State Map first and upload it on website and then issue the approval of STU for the scheme. There should not be any conflict for any existing lines / infrastructures shown on the Updated Map.
- ## In case of replacement of existing assets considering obsolescence, Utility needs to get the detailed explanation from OEM regarding the hurdles to keep existing assets with the life extension measures and also justification to declare assets as obsolete like errors in particular parts, Company policy to change product, hard for company to get associated parts, etc.

2. PART II (Particulars to be furnished for justification of works)

1. Need of the investment	(Loss reduction, increase in reliability, to fulfil new supply/load growth requirement, Creation of back up Facility, corelation with previous Schemes (Redundancy, Reliability, Augmentation of the system in terms of increase in capacity, N-1 compliance, Statutory Compliance, etc.))
	(The scheme shall be supported by the results of the load flow study or any other appropriate tools, study report/ OEM/Expert recommendation/impact of the scheme on network performance, MoEFCC/MOP/CEA Notification/Guidelines, etc.)
2. Timelines of the Project	(Priority to be submitted for implementation of work) (i.e., Urgent/Regular)
	(Basis on which the priority is decided by the Applicant with detailed justification)
	(Possibility of deferring the investment)
	(Consequential impact, if any, of deferring the capital investment on the Applicant)
3. Scheme for revised	Compare earlier urgency and present urgency.
approval / scope / cost	Other way to utilize assets partially installed through earlier DPR.
	Clarification how the existing system is withstanding although earlier approved scheme is not executed in time?
	Detailed reasoning for the change/ modification / revision in scope and cost along with the documentary proof
4. Proposed Capital Investment Scheme	(Applicant to provide justification on why the proposed capital investment is to be considered under Capex approval and not under Opex or Repairs and Maintenance works based on the definition of Capex specified in the Regulations) In case of revision in cost/ quantity —provide broad comparison of earlier and present costs. Justify cost / quantity increment.
5. Technical Justification	(Submission of report of OEM/ Independent Consultant/Third Party stating the need for investment)
	Clarify each type of test undertaken for checking the assets (As recommended by CEA or any competent authority) to be declared as showing sign of deterioration or obsolescence. Also provide benchmarks of specific authority for same.
	Clarify whether life extension is possible or replacement is only option available. Provide detail analysis for life extension.
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		ubmission of			•
	hindrances in investment will	-			and how this nces)
	(S	ubmission of ju	stificatio	n how this	investment will
	help in improv Applicant)	ring the perform	nance/op	erational e	fficiency of the
	(0	ther Technical	justifica	tion such	as necessary to
	Agency, provis	sions of Supply s notified by 1	Code/G MoEFCC	rid Code/C //MoP/CE <i>A</i>	dation of Expert other mandatory or to comply
		urrences /failur	es. Histo	ory of majo	assets, then then r overhauls and
	Prudency of the	e technical spec	eification	s as per ma	rket trend
6. Financial Justification	(H returns or savir		ment is g	going to g	ive the desired
		_			erms of increase plementation of
	Treatment of the assets.	of the old assets	if the sc	heme is for	replacement of
7. Consent of M-DNAC	(In case of network laying in parallel license area, whether the approval of M-DNAC for cost estimates has been received; copy of same to be submitted)				
8. Plan of other	Plan of oth	ner Transmissio	n Licens	ees (InSTS) and CTU etc
Transmission Licensees /CTU	need to be cons			,	
9. Phasing of Investment		T	T		1
	Year	Capex	Capita	llization	
10. Statutory / Safety Requirement		under EA 200)3 or to 1	neet any sa	nply with any afety / statutory

11. Cost Assessment/Cost Break- up.(Detailed breakup of	Particulars	Unit (No.)	Rate (in Rs.)	Amount Lakh)	(in	Rs.
each head is required. Utility may attach	Item 1						
separate sheets with the excel working	Item 2						
documentary proof justifying the rate							
reasonability)	Erection/						
	Civil Cost						
	Total						
	Contingency (@% of						
	Total)						
	Grand Total						
	*Unit rate as p	*Unit rate as per cost sheet data					
12. Least Cost analysis	Works considered by Applicant to meet the same purpose/objective		Ben case	mated Cost and efit of Investme (economic, tentionmental)	ent in eac	h	
	Alternative 1						
	Alternative 2						
	Alternative 3						
	Alternative with the lowest estimated cost and the quantified benefit is to be adopted.			— ne hig	ghest		
13. If not and If Deferred	If Not		Mer	rits:			
Analysis			Den	nerits:			
	If Deferred			rits:			
				nerits:			
	Detailed calculations for investment not done or o shown.			one or defe	rred t	to be	

14. Cost Benefit	1. Investment Cost vs. Benefits analysis
Analysis	2. ROI from Beneficiary/Consumer Point of View (Comparison of tariff without the proposed investment vs. with the proposed investment)
	3. Target Objective (Year wise Projection)
	4. Year wise Tariff impact due to Investment in terms of % of ARR and Rs./kWh
	5. Payback Period, NPV, IRR and other Financial Parameters for project assessment
	6. Justification for cost increment due to proposal for only any specific quality product or increased no. of quantity than normally required. Justify, why alternatives cannot be possible.
15. Methodology of Put to use of the asset and computing Percentage utilization of Project	(Documentary evidence that shall be submitted at the time of final approval as proof of put to use after completion. For e.g. Electrical Inspector Certificate/Metering data, / Load on the assets, etc.)
	(projected loading pattern for first 5 years)
	(Documentary evidence that shall be submitted at the time of final approval as proof of Utilisation for e.g. Transformer loading/Sub-station loading/ % VR reduction / Balance state for other Substations, etc.)
16. Constraints	1.Technical, Physical and Financial constraints, if any, in execution of the Scheme may be highlighted.
	2. Likely uncertainties or risks involved in the investment. Fall back options/mitigation measures planned by Applicant if these uncertainties/risk occur.
	4. Risk Mitigation plan proposed by the Applicant.
	5. Possible delays, both Controllable and uncontrollable
	6. RoW Issues/Land availability/Forest Area/Delay in other clearances, etc.
	7. Activity wise time bound plan to obtain the various approvals/clearances. Alternatives.
	7. Other constraints (if any)
17. Inclusion in STU Plan/Licence for Transmission Projects. Recommendation of the Transmission Planning	(Documentary Evidence to be provided for inclusion of this capex in STU Plan/Transmission Licence)

Committee as provided in the Grid Code .	
18. Works intended for adaptation of latest	(Conditions specified in the Regulations needs to be satisfied for taking up such work)
Technology/ Improvement/Upgradatio n of Existing	Justification for urgency to implement change. Detail checks for keeping existing one asset till completion of its useful life.
Infrastructure	(In case above conditions are not satisfied, then Licensee to show readiness with documentary proof from local body/ authority for recovery of such investment invariably from those consumers who are benefiting from these improvement/upgradation works)
	(Cost Benefit analysis of latest technology w.r.t existing technology)
	(Balance useful life of existing assets proposed to be replaced/upgraded)
	(Basis/assessment for replacement of the existing assets)
19. Upstream/Downstre am arrangement	(Upstream/downstream arrangements for proposed capex)
	(Proof of upcoming upstream/ downstream network already in progress of work proposed to be taken up)
	(Proof of progress of upstream/ downstream network if work is already started)
	(If not started expected date of start of work and expected date of completion for interconnecting network)
	(Documents conveying necessary co-ordination to be done with G-T-D for such capex as mandated in the Regulations before filing for Capex approval and during the progress of the work, viz., Consent/Agreement Letter from respective interconnecting Genco/Licensee).
	(Declaration that Transmission Licensee has not considered the scope of the Distribution Licensee in its scope of work (Ex. EHV SS, land for Distribution SS, office etc.)
20. Statutory Clearances and Project Layout	Approval from Competent Authority Notional Green Tribunal (NGT) clearance, if applicable and the second sec
	2. National Green Tribunal (NGT) clearance, if applicable
	3. Clearance if acquired such as Forest, Aviation, Defence, CRZ, Wild Life Salt land Mangroves Local hodies etc. and tentative

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	plan to obtain such approval or at least application for forest clearance filed (List is not exhaustive; the Applicant is responsible for obtaining all applicable approvals/clearances)
	4. SLD, Grid maps, Diagrams/Project layout, etc.
	5. SLD to clearly indicate in different colours the existing diagram and proposed diagram after implementation of capex
	6. Proof of land acquisition if any or any other documentary proof of ongoing negotiations/intention to sell/lease land to be provided. In case of lease land – proof of non-availability of Govt. Land. Clarify steps taken for getting Govt. Land on priority.
	7. RoW clearances if acquired or Progress made on getting RoW clearances. Also, alternatives to be provided if RoW is not achieved on the proposed area/route.
	8. PERT Chart for Project Implementation and possibilities of delay with fall back plan in case of delay
	(All these submissions to be provided as Annexure)
21. Detailed Survey	(Survey Report to assess the project requirement and highlight difficulties in project execution/scope / route etc.)
22. Past Trends and Future projection	(Actual trend in last five years of the components/loading / parameters/cost relating to the proposed capex(based on which is the scheme is proposed) vis-a-vis future projection for 5 years after implementation of capex)
	For e.g. If the scheme is for improvement of performance say increase in capacity to avoid overloading of system, then past and future expected trend of loading, voltage profile, losses, etc., to be provided
23. Detailed Justification for quantity proposed	(Justification for quantity required against the proposed scope of work)
	(Validating the quantity proposed with the help of SLD/Survey report etc.)
24. Check list of the documents appended	Check list with appended documents to be appended. (All documents to be numbered.

FORMAT FOR APPROVAL OF CAPITAL INVESTMENT SCHEME BY THE COMMISSION

Scheme Approval Code	
2. Name of Applicant	(Name of the Applicant proposing to do the capex)
3. Name of the Capital Work	(E.g.Construction of 400/220kV Substation at, Construction of 220kV Transmission line at)
4. Category of DPR	(Under which of the categories specified in the Regulations, does the proposed work fall under)
5. Objective of the Capital Investment	(Overall objective of the work to be specified - like system strengthening, system augmentation, replacement of assets, Renovation Modernization, etc.)
6. Whether the works can be considered as Capex or not	(After assessment of proposed works and based on the justification provided by Applicant, decision on whether the works can be considered as Capex)
7. Single line diagram	(Comments based on SLD on how the investment is proposed to benefit in the long run.)
8. In-feed / Upstream-downstream arrangements	(Letter of confirmation from G-T-D for which in-feed is being arranged or not. Comments on proper arrangement if available or not? Also, any progress made on the in-feed arrangement)
9. Past five years trends and five year projection of the parameters based on which the scheme is proposed	Past five years trends and five year projection of the parameters based on which the scheme is proposed Ex. Loading details, loss reduction, Power Factor, Station Heat Rate, etc.

10. Statutory Approvals	approval are ava	(Whether Land/Right of way/ other approval are available. If not, whether methodolog for acquiring the same is given or not?)		
11. Phasing of Investment	Year	Capex	Cap	italization
	Likely Completion	on date:		
12. Cost Assessment	Particulars	Unit (No.)	Rate (Rs. /unit)*	Cost (in Rs. Lakh)
	Item 1			
	Item 2			
	Erection/Civil Work			
	Total			
	Contingency (@% of Total)	f		
	Grand Total			
	* Per unit rates	as per co	st sheet	
13. PERT Chart	(PE)	RT chart v	with comm	ents on
	 Completion st Contingency p 		elay)	
14. Deposit/grant funded	Contribution, Co	omments	on compli	

	(If Project is Grant funded, comments on availability of all documentary evidence and funding arrangement)
15. Part of CEA System Plan/STU Plan/Transmission Licence	(Whether transmission project is part of CEA's overall system planning study as well as the STU Plan and Licence)
16. Least Cost analysis	(Whether Least cost analysis is submitted and its prudence.
	Assessment of all possible alternatives to the proposed capex as submitted by Applicant.
	Assessment of Cost Benefit Analysis of the proposed project and its comparison with possible alternatives.
17. Approval of Competent Authority designated by the Board of Directors of the Company	(Whether Project is approved by Competent authority (delegated by Board of Directors))
18. Effectiveness of the proposed system	(Whether it meets at least the near future demand growth projections (in case of new infrastructure)
	Whether it would be able to provide the benefit claimed in the DPR)
19. Whether safety/statutory requirement	(Is Investment necessary to discharge the duties / obligations as per EA 2003 or to meet any other statutory or safety requirement?)
20. Safeguards from violation of Electricity Act, 2003	(Is the investment likely to constitute or result in violation of any of the provisions of the EA 2003, and if so, the safeguards)
21. Technical justification	(Whether the Project necessity is supported by any technical study like Load flow analysis, OEM/Third Party Report, Field report on shortcoming of existing assets, justification provided by Applicant for new investment, etc.)
22. Asset replacement criteria compliance	(Whether proposed capex meets Asset replacement criteria)
23. Upgradation of Existing Technology/Improvement works	(Whether proposed capex meets the criteria specified in the Regulations

	If not, whether the Licensee has submitted consent from the consumers benefitting from the same for recovery of cost of such investment)		
24. Clubbing of Schemes	(Whether the clubbing of Schemes, if any done by the Applicant is within the scope of the Regulations (Clubbing allowed in some cases))		
25. Consent of M-DNAC	(In case of network laying in parallel license area, whether the approval of M-DNAC has been received)		
26. Plan of other Transmission Licensees /CTU	Plan of other Transmission Licensees (InSTS) and CTU etc need to consider to avoid duplications of work.		
27. Prudence of Cost estimate	(Whether Cost estimate is based on rates of Cost Sheet? If not, whether reason is justified)		
28. Verification of Scope of Works proposed	(Whether the scope of work proposed is necessary to meet the objective of the Project and whether quantity is proposed is in line with the scope of workto ensure that only necessary scope of work is proposed).		
29. Proposed Funding	(Is proposed funding of Loan by Bank/FI and/or infusion of Equity by Applicant in line with phasing of execution of works? Whether Interest rates are in line with prevailing market rates or existing actual interest rates of Applicant?)		
30. Impact of proposed Capex on Tariff	Year Year Year Year Year 1 2 3 4 5		
	Tariff Impact		
31. 'IF not' and 'IF deferred' analysis.	(Negative impact, if any, if the proposed capex is either not carried out or is deferred for some period)		
32. Third Party Verification	Whether physical verification of Project by third party is required?		

33. Specific	Directives	to	the	Based on the analysis, any specific directives to the
Applican	t			Applicant in the approval letters.

APPENDIX 2:

Guidelines for Procurement of material through Competitive Bidding

- 1. The Applicant shall invite and finalise tenders for procurement of equipment, material and/or services with a transparent, competitive, fair and reasonable procedure. Applicant to resort to open tendering for all types of procurement and shall not resort to procuring it only from the registered vendors.
- 2. Advertisement in the form of Tender Notice should be given in at least two national dailies having wide circulation and be posted on the Applicant's website and reputed Tendering website.
- 3. Minimum time to be allowed for submission of Bids should be three weeks (four weeks in case of Global Tender enquiry). Deadline may be extended if less than 3 bids are received.
- 4. Tender Notice should contain description, specification and ceiling price of the goods and quantity; period and terms of delivery; cost of the tender/bidding document; place(s) and timing of sale of tender documents; place and deadline for receipt of tenders; place, time and date for opening of tenders; amount and Form of bid security / earnest money deposit; any other important information.
- 5. Tender document should clearly mention the eligibility criteria such as qualifications, minimum experience, past performance, technical capability, manufacturing facilities, financial position, ownership or any legal restriction, etc., as applicable.
- 6. The procedure for preparing and submitting the tenders; deadline for submission of tenders; date, time and place of public opening of tenders; requirement of earnest money and performance security guarantee; parameters for determining responsiveness of tenders; evaluating and ranking of tenders and criteria for full or partial acceptance of tender and conclusion of contract should be incorporated in the tender enquiry in clear terms.
- 7. Tender document shall be issued with bifurcation of receipt of quotations in two parts. The first part is to contain the relevant technical specifications and allied commercial details as required in terms of the tender documents and the second part should contain only the price quotation. The first part is commonly known as "Technical Bid" and the second part "Financial Bid." The Technical Bid and the Financial Bid should be sealed by the tenderer in separate covers duly superscribed and both these sealed covers are to be put in a bigger cover, which should also be sealed and duly superscribed as explained above. First, the technical bids are to be opened at the prescribed time and date and the same will be scrutinized and evaluated by the committee of officers/competent authority of the Applicant with reference to parameters prescribed in the tender documents and the offers received from the tenderers. Thereafter, in the second stage, the financial bids of only the

- technically qualified bidders are to be opened for further scrutiny, evaluation, ranking and placement of contract.
- 8. Where the price has several components like price of the goods, costs for installation and commissioning, operators' training, etc., the tenderers should be asked to furnish the cost break-up indicating the applicable prices for each such component (as specified and desired in the tender document) along with overall price. The tender documents are to specify the currency (currencies) in which the tenders are to be quoted (priced).
- 9. In order to obviate delays, a committee of officers of the Applicant representing finance, Stores, Purchase, indenting department, etc., may be constituted at levels appropriate to the value of the procurement, which will open, process, evaluate and give its detailed recommendations to the competent authority within the Applicant.
- 10. Tenders should be opened immediately after the deadline of receipt of tenders with minimum time gap in between in the presence of the representatives of the tenderers if they present themselves. Quotations sent by e-mail, telex, cable or facsimile are to be ignored and rejected. Minimum three bids should be considered for the purposes of technical evaluation.
- 11. All the tenders are to be evaluated strictly on the basis of the terms and conditions incorporated in the tender enquiry document (based on which offers have been received) and the terms, conditions etc. stipulated by the tenderers in their tenders. No new condition should be brought in while evaluating the tenders.
- 12. Important events connected with the tendering process and the selection of the bidder shall be immediately uploaded on the notice board/web site, for eg, the bidders who qualify in Part 1 (i.e., technical bid in case of two-part bid), the successful tenderer to whom the contract is awarded, etc. After placing the Order with the successful bidder, the Purchase Order shall be posted on the web site of the Applicant.
- 13. Negotiations with the tenderers are to be avoided. However, where considered necessary, price negotiations may be resorted to, but only with the lowest evaluated responsive tenderer, and that too with the approval of the competent authority of the Applicant, after duly recording the reasons for such action.
- 14. Retendering may be resorted to if there is no adequate response to the Tender advertisement or the L1 prices are substantially higher in comparison to the estimated cost and negotiations have not met with positive results and/or in case of suspicion of cartel formation after receipt of quotations.
- 15. Single Tender Enquiry should be resorted to only in unavoidable situations with the approval of the competent authority of the Applicant and the reasons for arriving at such decision are to be recorded in cases where:
 - a. It is known that only a particular firm is the manufacturer of the required goods.

b.	A Proprietary Article Certificate may be provided before procuring the goods from a single source indicating the reasons for resorting to such type of purchase, the financial concurrence and approval of competent authority of the Applicant obtained etc."