

## TELANGANA STATE ELECTRICITY REGULATORY COMMISSION

## EXPLANATORY NOTE ON

# DRAFT TELANGANA STATE ELECTRICITY REGULATORY COMMISSION (MULTI YEAR TARIFF) REGULATION, 2023

November, 2023

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### 1 Introduction

#### 1.1 Background & Regulatory Framework

As per Section 86 (1) (a) of the Electricity Act, 2003 ("EA 2003" or "the Act"), the State Electricity Regulatory Commissions (SERCs or Commissions) have been assigned the function of determining the tariff for generation, supply, transmission and wheeling of electricity, wholesale, bulk or retail, as the case may be, within the State.

The Electricity Act, 2003 (EA 2003) requires the appropriate Commission to be guided by Multi Year Tariff (MYT) principles and the principles and methodologies specified by the Central Electricity Regulatory Commission (CERC) for determination of the tariff applicable to generating companies and transmission licensees, while specifying the terms and conditions for determination of tariff. Section 61 of the EA 2003 stipulates:

- "61. The Appropriate Commission shall, subject to the provisions of this Act, specify the terms and conditions for the determination of tariff, and in doing so, **shall be guided by the following**, namely:-
- (a) The principles and methodologies specified by the Central Commission for determination of the tariff applicable to generating companies and transmission licensees;
- (b) The generation, transmission, distribution and supply of electricity are conducted on commercial principles;
- (c) The factors which would encourage competition, efficiency, economical use of the resources, good performance and optimum investments;
- (d) Safeguarding of consumers' interest and at the same time, recovery of the cost of electricity in a reasonable manner;
- (e) The principles rewarding efficiency in performance;
- (f) Multi year tariff principles;
- (g) That the tariff progressively reflects the cost of supply of electricity and also reduces cross-subsidies in the manner specified by the Appropriate Commission;
- (h) The promotion of co-generation and generation of electricity from renewable sources of energy;
- (i) The National Electricity Policy and tariff policy" (emphasis added)

CERC has notified the CERC (Terms and Conditions of Tariff) Regulations, 2019 [CERC Tariff Regulations, 2019] for the Tariff Period from 01.04.2019 to 31.03.2024 followed by the 1<sup>st</sup> Amendment and 2<sup>nd</sup> Amendment. In accordance with Section 61(a) of the Act, the Commission has been guided by the principles and methodologies specified by the CERC for determination of the tariff applicable to generating companies and transmission Licensees, while framing the Tariff Regulations for the Control Period commencing from 01.04.2024. Also, the Commission has continued the approach of Multi Year Tariffs in accordance with Section 61(f) of the Act.

Further, as per Section 62 of the Act, the Appropriate Commission has to determine the tariff for supply of electricity by a generating company to a distribution licensee, transmission, wheeling and retail sale of electricity, and may require the licensee or generating company to furnish separate details in respect of generation, transmission and distribution of tariff. The relevant extract of Section 62 of the Act is reproduced herewith:

- "62. (1) The Appropriate Commission shall determine the tariff in accordance with provisions of this Act for –
- (a) supply of electricity by a generating company to a distribution licensee:

...

- (b) transmission of electricity;
- (c) wheeling of electricity;
- (d) retail sale of electricity:

•••

(2) The Appropriate Commission may require a licensee or a generating company to furnish separate details, as may be specified in respect of generation, transmission and distribution for determination of tariff.

. . .

(5) The Commission may require a licensee or a generating company to comply with such procedures as may be specified for calculating the expected revenues from the tariff and charges which he or it is permitted to recover..."

Also, the National Electricity Policy and Tariff Policy have been notified by the Ministry of Power, Government of India, which provides the guidelines for determination of the revenue requirement and tariff. The National Electricity Policy provides certain

guidelines as regards performance norms and the need to provide incentives and disincentives, as reproduced below:

"5.8.5 All efforts will have to be made to improve the efficiency of operations in all the segments of the industry. Suitable performance norms of operations together with incentives and disincentives will need to be evolved along with appropriate arrangement for sharing the gains of efficient operations with the consumers. This will ensure protection of consumers' interests on the one hand and provide motivation for improving the efficiency of operations on the other".

The Tariff Policy notified on 28.01.2016 stipulates as under:

"5.11 Tariff policy lays down the following framework for performance based cost of service regulation in respect of aspects common to generation, transmission as well as distribution...

. . .

#### h) Multi Year Tariff

1) Section 61 of the Act states that the Appropriate Commission for determining the terms and conditions for the determination of tariff shall be guided, interalia, by Multi-Year Tariff (MYT) principles. **The framework should feature a five-year control period**. The initial control period may, however, be of 3 year duration for transmission and distribution if deemed necessary by the Regulatory Commission on account of data uncertainties and other practical considerations..."

The determination of tariff for generation, transmission and distribution wheeling, retail supply and fee and charges for SLDC for the control period ending on 31.03.2024 is governed by the following Regulations notified/adopted by the Commission:

- (i) Regulation No. 3 of 2005 being the (Treatment of Other Businesses of Transmission Licensees and Distribution Licensees) Regulation, 2005.
- (ii) Regulation No. 4 of 2005 being the (Terms and Conditions for Determination of Tariff for Wheeling and Retail Sale of Electricity) Regulation, 2005 along with Amendments thereof.
- (iii) Regulation No. 5 of 2005 being the (Terms and Conditions for determination of Transmission Tariff) Regulation, 2005 along with Amendments thereof.
- (iv) Guidelines for Investment Approval (February 2006).
- (v) Guidelines for Load Forecasts, Resource Plans, and Power Procurement (December 2006).

- (vi) Regulation No. 1 of 2006 being the (Levy and Collection of fees and charges by State Load Despatch Centre) Regulation, 2006 along with Amendments thereof.
- (vii) Regulation No. 1 of 2019 being the (Terms and Conditions of Generation Tariff) Regulation, 2019 along with Amendments thereof.

The Regulation No. 1 of 2019 is effective upto 31.03.2024. With the objective of consolidating all the Tariff Regulations governing the determination of tariff along with suitably amending the provisions of the current Regulations based on the experiences in implementation of MYT Regulations in the previous periods, the Commission has framed the Draft Multi Year Tariff Regulation for the period commencing from 01.04.2024 onwards covering the Generation Business (Conventional), Transmission Business, Distribution Wheeling Business, Retail Supply Business, and SLDC for the period commencing from 01.04.2024 onwards. The rationale for the key changes proposed in the MYT Regulation vis-à-vis the current Regulations have been elaborated in this Explanatory Memorandum.

The Commission while formulating draft TSERC MYT Regulation, 2023, has endeavoured to balance the interest of consumers, generating companies, transmission licensees, distribution licensees and SLDC. Based on the analysis, possible regulatory options for the next Control Period have been discussed in subsequent Chapters.

The Explanatory Memorandum is organised in the following Chapters:

Chapter 1: Introduction

Chapter 2: Multi Year Tariff Framework

**Chapter 3**: Financial Principles

**Chapter 4**: Norms and Principles for determination of Tariff for generating stations

**Chapter 5:** Norms and Principles for determination of Revenue Requirement and Tariff for transmission licensees

**Chapter 6:** Norms and Principles for determination of Revenue Requirement and Wheeling Charges for Distribution Wheeling Business

**Chapter 7:** Norms and Principles for determination of Revenue Requirement and Tariff for Retail Supply Business

**Chapter 8:** Norms and Principles for determination of Charges for the State Load Despatch Centre.

#### 2 Multi Year Tariff Framework

#### 2.1 Objectives

This Chapter of the Explanatory Memorandum elaborates the General Principles for formulation of Regulations for approval of Aggregate Revenue Requirement (ARR) and Tariff under a Multi Year Tariff framework for the period commencing from 01.04.2024 onwards.

The broad objectives of any regulatory framework are to:

- (a) Provide regulatory certainty to the Utilities, investors and consumers by promoting transparency, consistency and predictability of regulatory approach, thereby minimizing the perception of regulatory risk;
- (b) Address the risk sharing mechanism between Utilities and consumers based on controllable and uncontrollable factors:
- (c) Ensure financial viability of the sector, ensure growth and safeguard the interest of the consumers;
- (d) Establish operational norms for Generation, Transmission, and Distribution businesses;
- (e) Promote operational efficiency.

Long-Term Tariff principles are intended to give clarity to the Generating Companies, Transmission Licensees, Distribution Licensees, consumers, and the other stakeholders regarding the principles governing the determination of revenue requirement and tariffs in the State of Telangana.

For the generating companies and licensees, the principles provide clarity on the regulatory framework applicable over the long-term, and help finance growth and operations better, and facilitate improvement in supply quality and customer service. Secondly, the design of efficiency incentives helps promote operational efficiency.

For consumers, improvement in operational efficiency translates into more costeffective tariffs, as efficient licensees can provide better supply and service, and remain viable.

Para 5.3 (f) of the Tariff Policy stipulates as under:

"f) Operating Norms

Suitable performance norms of operations together with incentives and dis-incentives would need be evolved along with appropriate arrangement for sharing the gains of efficient operations with the consumers. Except for the cases referred to in para 5.3 (h)(2), the operating

parameters in tariffs should be at "normative levels" only and not at "lower of normative and actuals". This is essential to encourage better operating performance. The norms should be efficient, relatable to past performance, capable of achievement and progressively reflecting increased efficiencies and may also take into consideration the latest technological advancements, fuel, vintage of equipments, nature of operations, level of service to be provided to consumers etc. Continued and proven inefficiency must be controlled and penalized....." (emphasis added)

#### 2.2 Commencement

The Commission, in the draft TSERC MYT Regulation, 2023 has specified that this Regulation shall be applicable for all matters covered under the Regulation for the period commencing from 01.04.2024 onwards.

#### 2.3 Control Period

The Control Period means a multi-year period typically ranging from 3 to 5 years, fixed by the Commission from time to time for the duration of which, the principles for determination of Aggregate Revenue Requirement (ARR) and tariff will be specified in the Regulation.

As stated earlier, the Act stipulates that MYT framework has to be specified for determination of ARR and Tariffs. The Tariff Policy has stipulated a five-year MYT framework, after the initial Control Period.

Hence, it is proposed to have each Control Period for a duration of five (5) financial years, starting from 01.04.2024. Accordingly, the Control Period has been specified in the draft TSERC MYT Regulation, 2023.

#### 2.4 Petitions to be filed in the Control Period

As per the present Regulations, the licensees and SLDC are required to file Multi Year Tariff Petitions by 30<sup>th</sup> November of the year preceding the first year of the Control Period. Although the Regulation No. 4 of 2005 stipulates filing of MYT Petition for Retail Supply Business, the Commission had been according permission to the distribution licensees for filing of Petitions for determination of Retail Supply Tariffs on annual basis.

The Regulation No. 1 of 2019 specify Mid-Term Review and End of Control Period review. The Regulation Nos. 4 of 2005, 5 of 2005 and 1 of 2006 specify End of Control Period review as well as periodic review. In order to bring uniformity in the filing of Tariff Petitions by the generating companies and licensees, the following Tariff Petitions have been included in the draft TSERC MYT Regulation, 2023:

#### 2.4.1 Multi Year Tariff Petition

The scope of the MYT Petition to be filed in accordance with the draft TSERC MYT Regulation, 2023 shall be as under:

#### **Generating entity:**

- i. True-up of preceding year for generation business;
- ii. True-up of preceding year for integrated mine;
- iii. Proposal of Tariff for each year of the Control Period for generation business;
- iv. Proposal of Input Price of coal supplied from integrated mine for each year of the Control Period.

### Transmission licensee, distribution licensee (for wheeling business) and SLDC:

- i. True-up of preceding year;
- ii. Aggregate Revenue Requirement for each year of the Control Period;
- iii. Proposal of Tariff and Charges for each year of the Control Period.

#### Distribution licensee (for retail supply business)

- i. True-up of preceding year;
- ii. Aggregate Revenue Requirement for each year of the Control Period;
- iii. Revenue from retail sale of electricity at existing tariffs & charges and projected revenue gap for the first year of the Control Period;
- iv. Proposal of consumer category wise retail supply tariff and charges for first year of the Control Period.

#### 2.4.2 Annual Tariff Petition

The scope of the Annual Tariff Petition to be filed in accordance with the draft TSERC MYT Regulation, 2023 shall be as under:

#### **Generating entity:**

- i. True-up of preceding year for generation business;
- ii. True-up of preceding year for integrated mine;
- Proposal of Revised Tariff for the ensuing year of the Control Period for generation business;
- iv. Proposal of Revised Input Price of coal supplied from integrated mine for the ensuing year of the Control Period.

## Transmission licensee, distribution licensee (for wheeling business) and SLDC:

- i. True-up of preceding year;
- ii. Aggregate Revenue Requirement for ensuing year of the Control Period;
- iii. Proposal of Tariff and Charges for ensuing year of the Control Period.

#### Distribution licensee (for retail supply business)

- i. True-up of preceding year;
- ii. Revised Aggregate Revenue Requirement for ensuing year of the Control Period;
- iii. Revenue from retail sale of electricity at existing tariffs & charges and projected revenue gap for the ensuing year of the Control Period;
- iv. Proposal of consumer category wise retail supply tariff and charges for ensuing year of the Control Period.

#### 2.5 Controllable and Uncontrollable factors

While formulating the MYT framework, it is essential to clearly specify the controllable factors and uncontrollable factors and their treatment, since, the impact on the Utility due to uncontrollable factors is generally considered as a pass-through element in tariffs, while the impact of efficiency gain or loss on account of identified controllable factors has to be adjusted between the Utility and the consumers in a specified manner.

Clause 12 of the draft TSERC MYT Regulation, 2023 specifies the various controllable and uncontrollable factors to be considered and clauses 13 and 14 provide the mechanism for treatment of gains or losses arising on account of such uncontrollable and controllable factors, respectively.

#### 2.5.1 Controllable Factors

Controllable Factors are those considered to be under the Utility's control.

Clause 6.7.1 of the Regulation No. 1 of 2019 specifies that variations in capitalisation on account of time or cost overruns or inefficiencies in the implementation of a capital expenditure scheme not attributable to an approved change in scope, change in statutory levies or force majeure events, shall be considered as controllable, since the Utility is responsible for any delay in the project completion and the impact of the delay in terms of cost should not be passed on to consumers, except in specific circumstances. This is because the delay in capitalisation leads to higher interest during construction and allied expenses. Such change in capitalisation would also impact the other heads of ARR such as interest expenses, depreciation and Return

on Equity. However, the Clause does not intend to share loss on account of time and cost overruns or inefficiencies with consumers. Rather, it would be dealt on case-to-case basis. This has to be undertaken at the time of prudence check of the capital cost. In view of the above, variation in capitalisation on account of time and cost overrun or inefficiencies as well as interest charges, Return on Equity and depreciation on account of such variation has been deleted from the list of Controllable factors. Further, a proviso has been added to prudence check of capital cost of the project, which has been discussed subsequently in next Chapter.

The Commission has specified the indicative list of Controllable factors in Clause 12.2 of the draft TSERC MYT Regulation, 2019 as under:

"Variations or expected variations in the performance of the Petitioner, which may be attributed by the Commission to controllable factors include, but are not limited to the following:

- (a) Variation in technical and commercial losses;
- (b) Variation in operational norms;
- (c) Variation in amount of interest on working capital;
- (d) Variation in Operation & Maintenance expenses;
- (e) Variation in additional interest on pension bonds;
- (f) Variation in Coal transit losses."

#### 2.5.2 Uncontrollable Factors

The Commission has specified the Uncontrollable Factors in Clause 12.1 in the draft TSERC MYT Regulation, 2023 as under:

"The "uncontrollable factors" shall comprise the following factors, which were beyond the control of, and could not be mitigated by the Petitioner, as determined by the Commission:

- (a) Force Majeure events;
- (b) Change in law;
- (c) Variation in fuel cost on account of variation in price of primary and/or secondary fuel prices;
- (d) Variation in sales:

- (e) Variation in the cost of power purchase due to variation in the rate of power purchase, subject to clauses in the power purchase agreement or arrangement approved by the Commission;
- (f) Variation in inter-State Transmission Charges;
- (g) Variation in market interest rates for long-term loan
- (h) Variation in income tax rates;
- (i) Variation in freight rates; and
- (j) Revenue from sale of power from consumers."

## 2.6 Mechanism of Sharing of Gains and losses on account of uncontrollable and Controllable Factors

#### 2.6.1 Sharing of Gains and Losses on account of Uncontrollable Factors

Clause 12.5 of the Regulation No. 4 of 2005 (inserted vide Regulation No. 1 of 2023) specifies the methodology for recovery or refund of the Fuel Surcharge Adjustment for the distribution licensee. The same has been proposed to be retained in the draft TSERC MYT Regulation, 2023.

## 2.6.2 Mechanism for sharing of Gains and Losses on account of Controllable Factors

Clause 6.9 of the Regulation No. 1 of 2019 specifies the method of sharing the gains and losses on account of controllable factors. The same clauses are proposed to be retained in the TSERC MYT Regulation, 2023.

### 3 Financial Principles

#### 3.1 Financial Prudence

Clause 6 of the Regulation No. 1 of 2019 specifies the framework for assessing the Financial Prudence with regard to the following factors:

- (a) revenue;
- (b) revenue expenditure;
- (c) capital expenditure.

The Regulation provided that the Commission may disallow a part of the ARR, as an efficiency measure, if it finds the exercise of such prudence to have been deficient.

For proper monitoring of inventory and inventory management within prudence of revenue expenditure, it is proposed to add a proviso requiring submission of Cost Audit Report along with the true-up Petition, to ensure that the company is following optimum inventory management as proposed. The proposed proviso in the draft TSERC MYT Regulation, 2023 is as under:

"Provided also that the generating entity or licensee shall submit the Cost Audit Report along with the true-up Petition to justify the revenue expenses incurred as well as inventory management policies."

Further, it is proposed to add a clause requiring the generating entity to project generation realistically, as reproduced below:

"whether projected generation is based on realistic estimates, and adequate justification has been provided for any anomalous increase in generation projected by the generating company;"

It is also proposed to add a clause requiring projection of capital expenditure and capitalisation realistically, as reproduced below:

"whether projected capital expenditure and capitalisation is based on realistic estimates, and adequate justification has been provided for any anomalous increase in capital expenditure and capitalisation projected by the generating entity or licensee;"

#### 3.2 Capital Cost

Clause 7(C) of the Regulation No. 1 of 2019 specifies the components of capital cost for a generating station. The Commission proposes to specify the principles for determination of capital cost to be applicable for generating stations as well as for licensees and SLDC in the draft TSERC MYT Regulation, 2023.

It has been observed that the utilities in the State are financing the capital projects predominantly by debt during the initial phases of the project execution and in the later stages by equity financing. The infusion of debt and equity has to be more or less on pari passu basis as per normative debt equity ratio. Therefore, it has been proposed to limit the allowable IDC to the 75% of the funds deployed as under:

"21.1(b) interest during construction and financing charges, on the loans (i) being limited to 75% of the funds deployed, in the event of actual loan in excess of 75% of the funds deployed, by treating the excess loan amount as equity, or (ii) being equal to the actual amount of loan in the event of the actual loan less than 75% of the funds deployed."

Clause 7.17 of the Regulation 1 of 2019 specify the ceiling limit of initial spares for generating stations. The same have been retained in the draft TSERC MYT Regulation, 2023. The ceiling limit of initial spares for transmission system and distribution system have also been specified in the draft TSERC MYT Regulation, 2023.

As discussed in earlier Chapter, the proviso has been added to prudence check of the capital cost regarding the treatment of gain and loss on account of variation in capitalisation, due to time and cost overruns.

Further, in case of assets being reutilised or assets which have already been put to use after COD, being utilised in the regulated business at a later date, it is proposed to incorporate clauses to ensure that only the depreciated capital cost of such assets are considered.

#### 3.3 Additional Capitalization

The Regulation No. 1 of 2019 specify the following types of Additional Capitalisation:

 within the original scope of work, after the date of commercial operation and up to the cut-off date;

The Regulation Nos. 4 of 2005, 5 of 2005 and 1 of 2006 do not have explicit provisions regarding the additional capitalisation.

The Commission proposes to clearly segregate the additional capitalisation within the original scope and upto cut-off date, additional capitalisation within original scope and after cut-off date, and additional capitalisation beyond the original scope. Further, the Commission proposes an enabling provision for Additional Capitalisation on account of revision of emission standards.

#### 3.4 Debt - Equity Ratio

Clause 9.1 of the Regulation No. 1 of 2019 specifies the normative debt-equity ratio of

70:30. The Regulation Nos. 4 of 2005 and 5 of 2005 specify the debt-equity ratio to be determined by the Commission at the beginning of the Control Period. The capital expenditure made by licensees and generating companies should be done at an optimum debt-equity ratio, in order to balance the need for providing sufficient returns that can be earned by licensees and generating companies and protecting the interest of consumers. Based on the experience of Utilities in the State, the normative debt-equity ratio has been proposed as 75:25.

#### 3.5 Depreciation

The Regulation Nos. 4 of 2005, 5 of 2005 and 1 of 2019 specify the straight line method for depreciation with a salvage value of 10%. It is proposed to continue with the same approach with few exceptions to assets like IT equipment. Further, it is proposed to allow the recovery of depreciable value uniformly over the useful life of the individual asset class. Accordingly, the useful life of the individual asset classes has been specified in the draft TSERC MYT Regulation, 2023.

In the regulated power sector, depreciation is used as a source of funds to meet the repayment obligations in order to minimise debt risk, as the cash flow of the regulated business is limited to the ARR approved by the Commission, which does not include the amount required for repayment of loan. If there is no outstanding of actual or normative loans, then such depreciation beyond the debt capital amounts to the equity investment also being repaid, once the loans are repaid. However, Return on Equity is allowed for the equity investment, even after the entire loan has been repaid. The Commission is of the view that depreciation beyond 75% of the capital cost or actual debt, amounts to undue enrichment to the Utility. Hence, it would be appropriate to utilise such depreciation for reduction/repayment of equity. Accordingly, it has been proposed to utilise the depreciation allowed for each year beyond 75% of the asset cost or actual debt component used for funding such asset in case the debt funding is higher than 75% percent of the asset cost for reduction of equity during the year.

#### 3.6 Return on Equity

In any business, in addition to recovery of the costs incurred, the investors are entitled to earn an appropriate return on their investment, since there are alternative investment opportunities and the investor has to choose between these alternative investment opportunities, keeping in view his risk-return profile.

Returns are allowed on the Rate Base of Utilities for the investments made by Utilities in the regulated business. The Commission in Regulation No. 1 of 2019 has adopted Return on Equity approach, while in Regulation Nos. 4 of 2005 and 5 of 2005 the Return on Capital Employed approach has been adopted. Many State Electricity

Regulatory Commissions (SERCs) in India have adopted the RoE approach for providing returns. CERC has also been following the RoE approach. Hence, it is proposed to adopt RoE approach for generating stations, licensees and SLDC in order to bring uniformity among all the utilities.

Clause (d) of Section 61 of the Act provides that the Commission while specifying the terms and conditions for determination of tariff, shall be guided by the principle of "safeguarding of consumers interest and at the same time, recovery of cost of electricity in a reasonable manner".

Regulation No. 1 of 2019 specify the rate of RoE for generating stations as 15.50% and 16.50% based on the type of the generating station. The Regulation Nos. 4 of 2005 and 5 of 2005 specify the rate of RoE to be determined by the Commission at the beginning of the Control Period. The Commission has been approving the rate of RoE for transmission licensees as 14%, Distribution Wheeling business as 14% along with Supply Margin for at 2% thereby making the total rate as 16% for distribution licensees. The Commission proposes to retain the same rates of RoE in the draft TSERC MYT Regulation, 2023.

The Regulation No. 1 of 2019 specify the base rate of RoE to be grossed up with effective tax rate. The Commission proposes to continue with the same approach in the draft TSERC MYT Regulation, 2023.

#### 3.7 Interest on Loan

Clause 12 of the Regulation No. 1 of 2019 specifies the principles for allowing interest on long-term loans, with interest being calculated based on weighted average rate of Interest of actual loan portfolio and repayment of loan being considered equal to the depreciation. It is proposed to clarify that at the time of truing up, the weighted average interest rate of the actual long-term loan portfolio during the concerned year shall be considered for computing the interest expenses.

In the existing Regulations, IDC incurred on account of excess drawls of debt is allowed or disallowed, partly or fully, subject to prudence check. It has also been seen that in many cases, there is a time and/or cost over-run, which results in higher IDC, and therefore, higher capital cost. In case of delay in project execution, excess IDC may be partly/fully disallowed based on the Judgment of Hon'ble Appellate Tribunal for Electricity dated 27.04.2011 in Appeal No. 72 of 2010, however, the impact of the delay on the supply of electricity should be avoided. It is proposed that allowance of IDC in the capital cost shall be subject to justification and submission of documentary evidence.

Under the provisions for Refinancing of loans in the existing Regulations, net savings on interest and such benefit shall be shared between beneficiaries and generating entity in the ratio of 2:1, and the costs associated with such refinancing shall be borne by the beneficiaries. However, it is proposed that such refinancing of loans should be unconditional, beneficial to the entity and should be at the best terms of interest rate available at the market when refinancing is done by the beneficiary. It is proposed that refinancing should be done from banks and financial institutions recognised by Reserve Bank of India (RBI). It has also been observed that the interest cost has increased as a result of refinancing, which though disallowed by the Commission, leads to a situation where there is lack of clarity regarding the interest rate to be considered. It is hence, proposed to clarify that in such cases, the SBI MCLR shall be considered as the rate of interest.

#### 3.8 Interest on Working Capital

Clause 13 of the Regulation No. 1 of 2019 specifies the principles of computing normative interest on working capital for generating stations. It is proposed to clarify that while computing working capital requirement for the ensuing year, the normative O&M expenses shall be considered, and at the time of True up, revised normative O&M expenses shall be considered. The Commission is of the view that correlation of maintenance spares to Gross Fixed Assets (GFA) is more appropriate than to the O&M expenses and accordingly, the maintenance spares in the normative working capital have been linked to the opening GFA for the year.

The Commission is of the view that in case the Fuel Supply Agreement provides for payment of fuel cost in advance, either for the full month or part of the month, then to that extent, the payables for fuel should not be deducted while computing the working capital requirement, provided the advance payment is actually made and substantiated by documentary evidence. A proviso has been introduced to this effect.

Further, the prevailing Regulations provides the cost of fuel towards stock for 15 days for pit-head generating stations and 30 days for non pit-head generating stations or maximum of fuel stock storage capacity, whichever is lower. In this context, CERC Tariff Regulations, 2019 has reduced cost of fuel towards stock to 10 days for pit-head generating stations and 20 days for non-pit head generating stations. In the interest of consumers, the Commission has decided to adopt the approach adopted by CERC and accordingly modified the proviso for computation of cost of coal towards stock. 1

It is also proposed to clarify that at the time of true-up, the working capital shall be computed based on the actual average fuel stock or normative fuel stock, whichever is lower, so that only appropriate working capital requirement is allowed.

There is no existing gas based thermal generating station in the State nor any new generating stations are envisaged in the foreseeable future and therefore, the provisions of interest on working capital relating to the gas based thermal generating stations have not been included in the draft TSERC MYT Regulation, 2023.

Further, the components of normative interest on working capital have been specified for transmission business, distribution wheeling business, retail supply business and SLDC.

#### 3.9 Carrying Cost or Holding Cost

Carrying cost or Holding Cost is to be computed considering the net entitlement approved during the truing up exercise after deducting the incentive approved. Incentive is to be deducted, as the incentive becomes due only after True up and hence, the Utility was not required to fund this from other sources till its recovery. Accordingly, the provisions of Carrying Cost or Holding cost are proposed in the draft TSERC MYT Regulation, 2023.

#### 3.10 Rebate and Penalties

Clause 14.3 of the Regulation No. 1 of 2019 specifies the rebate for payment of bills of generation tariff by the beneficiaries. The Commission proposes to retain the same in the draft TSERC MYT Regulation, 2023.

The Commission does not propose to have any rebate for payment of bills of transmission tariff or wheeling tariff or retail supply tariff by the respective beneficiaries or the consumers, as the case may be.

Further, it is proposed to explicitly provide that the Penalties paid, if any, by the generating company or licensee shall not be allowed as an expense for the generating company or licensee.

#### 3.11 Delayed Payment Charge and Delayed Payment Surcharge

Clause 14.1 of the Regulation No. 1 of 2019 specifies the principles for Delayed Payment Charges. In this regard, it is proposed to reduce the rate of Delayed Payment Charge and link it to Marginal Cost of Funding Lending Rate. The rate of Interest on Working Capital has been specified as MCLR plus 150 basis points and accordingly, the Delayed Payment Charges rate has been proposed at the same rate.

The Commission proposes to have Delayed Payment Charge for transmission business and SLDC on similar lines of generation business.

The Delayed Payment Surcharge for electricity consumers is being specified in the Retail Supply Tariff Orders issued by the Commission from time to time. The Commission proposes to discontinue this practice from 01.04.2024 onwards specify

uniform Delayed Payment Surcharge for all categories of consumers at the rate equivalent to MCLR plus 150 basis points in the draft TSERC MYT Regulation, 2023.

## 4 Norms and Principles for determination of Tariff for generating stations

This Chapter deals with the issues related to the tariff applicable for a conventional generating station supplying power to the distribution licensees in the State of Telangana for which tariff is determined by the Commission under Section 62 of the Act.

#### 4.1 Background

The Telangana State Power Generation Corporation Limited (TSGENCO) and Singareni Collieries Company Limited (SCCL) are the generating entities in the State of Telangana, which own and operate conventional generating stations in the State and supply power to distribution licensees on long-term basis based on the tariff approved by the Commission.

The Commission proposes to determine generation tariffs using a performance-based approach linked to efficiency parameters, which would be used to provide incentives based on actual performance.

#### 4.2 Common Issues for Thermal and Hydel Generating Stations

#### 4.2.1 Procedure for determination of Tariff

The Regulation No. 1 of 2019 provides for determination of provisional tariff for the Unit or Stage or generating station as a whole, based on the capital expenditure incurred or projected to be incurred up to the Commercial Operation Date (COD), and additional capital expenditure incurred, duly certified by the statutory auditors. Such provisional tariff shall be applicable from the date of commercial operation till the determination of final tariff by the Commission. It also provides that the generating entity shall file the application for provisional tariff one hundred and eighty days (180) days prior to the anticipated COD of the Unit or Stage or generating station as a whole, as the case may be. The Commission in the draft TSERC MYT Regulation, 2023 has proposed the following changes in this aspect:

- The timeline for filing of application for provisional tariff has been changed to six months from the existing timeline of 180 days from the anticipated COD.
- If the COD is likely to be delayed beyond six months from the date of issue of
  the order approving the provisional Tariff, the generating entity shall have to
  submit a Petition for seeking extension of the validity of the applicability of the
  provisional Tariff, giving details of the present status of completion and
  justification for the delay in project completion.

#### 4.2.2 Sale of Infirm Power

Clause 11 of the Regulation No. 3 of 2021 being the (Deviation Settlement Mechanism and Related Matters) Regulation, 2021 specifies the treatment of infirm power. Accordingly, the treatment of infirm power has been provided in the draft TSERC MYT Regulation, 2023

#### 4.3 Norms and Principles for generating stations

#### 4.3.1 Components of Tariff

The tariff determined by the Commission is the primary source of revenue for a generating company and hence, the mechanism of cost recovery needs to be designed to ensure full cost recovery at normative levels prescribed by the Commission.

The Tariff for sale of electricity from a thermal generating station comprises two parts, viz., Annual Fixed Charges and Energy Charge. The energy charge component is intended to recover the fuel costs for the primary fuel and secondary fuel consumption at normative parameters, in case of thermal generating stations.

The Tariff for sale of electricity from a hydro generating station comprises of Annual Fixed Charges.

The Annual Fixed Charges comprises the following components:

- (a) Operation & Maintenance Expenses;
- (b) Depreciation;
- (c) Interest and finance charges on loan;
- (d) Interest on Working Capital;
- (e) Return on Equity;

#### Less:

(f) Non-Tariff Income.

Further, prior period income/expenses shall be allowed at the time of Truing-up based on audited accounts, on a case to case basis, if the income/expenses in that prior period have been allowed on actual basis, subject to prudence check.

#### 4.3.2 Operational Norms for Thermal generating Stations

The Regulation No. 1 of 2019 specifies the various norms of operation for thermal generating stations. The norms and their impact on tariff have been summarised in the following table:

Norms of Operation	Impact given in tariff
Plant Availability Factor (PAF)	Recovery of Annual Fixed Charges
Plant Load Factor (PLF)	Incentive for higher generation
Station Heat Rate (SHR)	Sharing of gains and losses on account of controllable factors
Auxiliary Consumption	Sharing of gains and losses on account of controllable factors
Secondary Fuel Oil	Sharing of gains and losses on account of controllable factors
Consumption (SFOC)	
Transit Loss (%)	Sharing of gains and losses on account of controllable factors

It is noted that CERC Tariff Regulations, 2019 has not specified separate norms for new generating stations and existing generating stations, and has specified the same norm for each performance parameter for both new as well as existing Generating Stations, with exceptions for few old generating stations of NTPC Limited, Neyveli Lignite Corporation, Damodar Valley Corporation and North Eastern Electric Power Corporation Limited. The Regulation No. 1 of 2019 also specified norms for some of the existing thermal generating stations on differential approach. The Commission proposes to discontinue this differential approach in specifying the norms of operation for existing thermal generating stations. Accordingly, the norms of operation for the existing and new generating stations have been proposed in the draft TSERC MYT Regulation, 2023 based on the norms of operation as specified in the Regulation No. 1 of 2019 and actual performance.

There is no existing gas based thermal generating stations in the State nor any new generating station is envisaged in the foreseeable future and therefore, the norms of operation for the gas based thermal generating stations have not been included in the draft TSERC MYT Regulation, 2023.

#### 4.3.3 O&M Expenses

Clause 19 of the Regulation No. 1 of 2019 specifies the methodology of determining the normative O&M expenses. The Commission proposes to continue with the same methodology with the following changes:

- The multiplication factor of 99% in the formula of O&M expenses has been discontinued.
- The efficiency factor of 1% in the computation of CPI Inflation and WPI Inflation has been discontinued.
- The additional Provision specified for Employee cost and A&G expenses have not been specified.

Further, for new generating stations that have achieved COD during the Control Period, the O&M expenses have been proposed at the norms specified in the CERC Tariff Regulations prevailing during the subject Control Period.

## 4.3.4 Computation and Payment of Annual Fixed Charges and Energy Charges for Thermal Generating Stations

#### **Annual Fixed Charges**

Clause 21.2 specifies the methodology of billing of capacity charges of thermal generating station on monthly basis. It is proposed to continue with the same methodology.

#### **Energy Charges**

The existing formula for determination of Energy Charge is proposed to be continued, with some modifications, as discussed below.

- The weighted average calorific value of primary fuel for tariff purposes is proposed to be changed to "as received" minus 85 kcal/kg on account of variation during storage at generating station.
- There is no existing gas based thermal generating stations in the State nor any new generating stations is envisaged in the foreseeable future and therefore, the provisions of energy charges for the gas based thermal generating stations have not been included in the draft TSERC MYT Regulation, 2023.

## 4.3.5 Computation and Payment of Annual Fixed Charges for hydro generating stations

The Annual Fixed Charges for hydro generating stations has been proposed to be recovered in twelve equal monthly instalments in proportion to the share allocation to each beneficiary in saleable capacity of the generating station.

## 5 Norms and principles for determination of input price of coal from Integrated Mine

#### 5.1 Background

CERC, vide the (Terms and Conditions of Tariff) (Second Amendment) Regulations, 2021 has specified the detailed provisions for determination of input price of coal from an integrated mine. The provisions of the said CERC Regulations are relevant for the state of Telangana also as SCCL and TSGENCO have been allotted integrated coal mines for end use in its generating stations. Accordingly, the provisions of the CERC (Terms and Conditions of Tariff) (Second Amendment) Regulations, 2023 regarding the determination of input price of coal from integrated mine have been included in the draft TSERC MYT Regulation, 2023 with the following modifications:

 The maintenance spares in the normative working capital have been specified in relation to the Gross Fixed Assets on similar lines of normative interest on working capital for generating stations.

## 6 Norms and principles for determination of revenue requirement and Transmission Tariff

#### 6.1 Overview of Transmission

Historically, the transmission network in the State of Telangana has been developed over the period by the Transmission Corporation of Telangana Limited (TSTRANSCO) which is a successor entity of erstwhile TRANSCO which came into existence on 01.02.1999). TSTRANSCO is the State Transmission Utility (STU) in accordance with Section 39 of the Act. Section 39(2) of the Act provides the functions of STU as under:

- "(2) The functions of the State Transmission Utility shall be -
- (a) to undertake transmission of electricity through intra-State transmission system;
- (b) to discharge all functions of planning and co-ordination relating to intra-State transmission system with –
- (i) Central Transmission Utility;
- (ii) State Governments;
- (iii) generating companies;
- (iv) Regional Power Committees;
- (v) Authority;
- (vi) licensees;
- (vii) any other person notified by the State Government in this behalf;
- (c) to ensure development of an efficient, co-ordinated and economical system of intra-State transmission lines for smooth flow of electricity from a generating station to the load centres;
- (d) to provide non-discriminatory open access to its transmission system for use by-
- (i) any licensee or generating company on payment of the transmission charges; or
- (ii) any consumer as and when such open access is provided by the State Commission under sub-section (2) of section 42, on payment of the transmission charges and a surcharge thereon, as may be specified by the State Commission:

Provided that such surcharge shall be utilised for the purpose of meeting the requirement of current level cross-subsidy:

Provided further that such surcharge and cross subsidies shall be progressively reduced 1[\*\*\*] in the manner as may be specified by the State Commission:

Provided also that the manner of payment and utilisation of the surcharge shall be specified by the State Commission:

Provided also that such surcharge shall not be leviable in case open access is provided to a person who has established a captive generating plant for carrying the electricity to the destination of his own use."

TSTRANSCO, as STU, is responsible for undertaking all activities related to transmission planning, co-ordination and ensuring development of an efficient, co-ordinated and economical system of intra-State transmission for smooth flow of electricity from generating stations to the load centres, within the State. The system for conveyance of electricity by transmission lines within the area of the State and including all transmission lines, sub-stations and associated equipment of Transmission Licensees in the State has been defined as the Intra-State Transmission System (InSTS). The onus of InSTS planning lies with TSTRANSCO, as STU.

The Act recognized 'transmission' as a distinct 'Licensed Business' activity to be undertaken by 'Transmission Licensee' in accordance with the licence conditions specified by the Commission in this regard. Consequent upon formation of the state of Telangana and its coming into being with effect from 02.06.2014, the Government of Andhra Pradesh has established Transmission Corporation of Telangana Limited vide G.O Ms. No 25 dt. 29.05.2014. The erstwhile Commission (Joint Commission for the States of Andhra Pradesh and Telangana) has issued deemed license to TSTRANSCO with license No. 1 of 2014 with effect from 23.06.2014.

#### 6.2 Applicability

The provisions contained in Part VII of the draft TSERC MYT Regulation, 2023 shall apply to the to the determination of Tariff for access and use of the intra-State transmission system pursuant to a Bulk Power Transmission Agreement or other arrangement entered into with a Transmission System User.

#### 6.3 Tariff Based Competitive Bidding for new InSTS schemes

Promoting competition is one of the key principles enshrined in the preamble of the Act, which aims to develop the electricity industry and optimise and rationalize the electricity tariff. Section 38 (2) and Section 39 (2) of the Act have entrusted the planning and coordination of the inter-State and intra-State Transmission Systems to the Central Transmission Utility ("CTU") and the STU, respectively. The overarching mandate of the CTU and STU is to ensure the development of an efficient, coordinated and economical system of inter-State and intra-State transmission systems, respectively. The said mandate may be achieved by adopting a fair and transparent system of planning, which takes into consideration interests of all the stakeholders.

The Act has created a conducive environment for investments in all segments of the industry, both for public sector and private sector, by removing entry barriers in different segments. Section 63 of the Act provides for participation through Competitive bidding mechanism giving an alternate mechanism and opening to the developers for developing the Transmission Infrastructure possibly in an economic and efficient manner. Further, the Act also states that the State Electricity Regulatory Commission, while discharging its functions as mentioned in the Act, shall be guided by the National Electricity Policy, National Electricity Plan and Tariff Policy.

The Electricity Regulatory Commissions, being the custodian of the statute, have been bestowed with the responsibility to facilitate and promote competition, efficiency and economy in activities of the electricity industry. The State Electricity Regulatory Commission has been vested with the responsibility to determine the tariff for generation, supply, transmission and wheeling of electricity, wholesale, bulk or retail, as the case may be, within the State under Section 86 of the Act. Further, Section 63 of the Act provides for adoption of the tariff determined through transparent process of bidding.

The Tariff Policy mandates competition in the development of inter-State as well as intra-State transmission projects by following competitive bidding route. Clause 5.3 of the Tariff Policy, 2016 as regards development of intra-State Transmission System stipulates that the same shall be executed through competitive bidding route provided for projects costing above a Threshold Limit, which shall be decided by the State Commission.

Ministry of Power (MoP), Govt. of India (GoI) notified the "Tariff Based Competitive Bidding (TBCB) Guidelines for Transmission Service" on 13.04.2006 under the provisions of Section 63 of the Act, for procurement of transmission services for transmission of electricity except under special circumstances. Subsequently, Standard Bidding Documents, i.e., Request for Qualification (RfQ), Request for Proposal (RfP), and Transmission Service Agreement (TSA) were notified by MoP, GoI in the year 2008, followed by subsequent amendments in the year 2008, 2010, 2011, 2020 and 2021 in these documents based on the Stakeholders' comments and suggestions to address the issues to further expedite the adoption of TBCB in transmission projects. Further, MoP vide its notification dated 15.03.2021 has recommended to all the State Governments /UTs to adopt TBCB for development of intra-State Transmission System. MoP issued revised Guidelines for Competitive Bidding in Transmission in August, 2021.

An Intra-State transmission licensee needs to carry out various works in order to maintain and augment transmission systems. As per recently commissioned and ongoing works being carried out by TSTRANSCO, the cost of schemes varies from minor works to major works such as power evacuation schemes. Further, the InSTS network such as number of EHV substation, lengths of the lines, voltage level, transformation capacity, required level of reliability etc drastically vary for each State. The Tariff Policy duly considering that there are various works, which are minor in nature and for which TBCB mode of development may not be feasible, has rightly included a Threshold Limit that needs to be specified by the SERC. However, Clause 5.3 of the Tariff Policy does not suggest the methodology or basis to be considered while specifying the Threshold Limit. This could be so to cater to the diversity among the States including the availability of network and the requirement of future network which would be very different for different states. Thus, it has put the onus of determination of this limit on the respective SERCs.

The State Electricity Regulatory Commissions of Maharashtra, Bihar, Rajasthan, Punjab, Haryana, Assam, Uttar Pradesh, Uttarakhand and Madhya Pradesh have specified this Threshold Limit however, no uniform methodology has been adopted in specifying the Threshold Limit by those Commissions.

It is observed that the Standard Bidding Guidelines and the Standard Bidding Documents does not specify any Threshold Limit for Transmission Project to be considered under TBCB mode. The only reference to the capital expenditure is with regards to qualification criteria wherein in order to qualify, a Bidder must have executed projects amounting to a minimum of Rs. 500 Crore in the last five years and in order for a project to qualify to meet the above requirement, the minimum individual project experience should be Rs. 100 Crore.

However, as the National Committee on Transmission has been constituted, the Committee based on the requirement and in association with CEA formulates and recommends to the Ministry of Power, Schemes to be either executed under TBCB mode or through Regulated Tariff Mechanism (RTM). The Committee does take care of the aspect that the project should not be too small as it will not attract competitive tariff thus, curtailing competition. Further, higher the cost of the project higher will be the saving in terms of reduction in tariff if the project gets implemented through TBCB. Therefore, taking a cue from the above and the actual investment approval data for various schemes executed and under execution, the Threshold Limit should not be too small as the same may not attract competition.

Based on the actual investment approval data towards cost of projects and in order to encourage competition amongst various stakeholders, it is proposed that the Threshold Limit be kept as Rs. 300 Crore for new transmission projects to be developed through TBCB process.

After notification of the TSERC (Multi Year Tariff) Regulation, 2019 STU will identify the projects to be executed under TBCB route in accordance with the provisions of the Regulation and recommend the same to the Empowered Committee, to be constituted by GoTS, for its approval. As per the functions of Empowered Committee, it will select the transmission projects to be executed under TBCB route as per the recommendations of the STU and also form the Bid Evaluation Committee.

#### 6.4 Components of Tariff

The draft TSERC MYT Regulation, 2023 specifies the components of Aggregate Revenue Requirement of the transmission licensee for respective year of the Control Period as under:

- (a) Operation and Maintenance expenses;
- (b) Depreciation;
- (c) Interest and finance charges on loan;
- (d) Interest on working capital;
- (e) Return on Equity; *minus:*
- (f) Income from Open Access charges;
- (g) Non-Tariff income;
- (h) Income from Other Business, to the extent specified in these Regulations: *Add:*
- (i) Impact of true-up for prior period as approved by the Commission.

#### 6.5 Determination of transmission tariff

Clause 20.1 of the Regulation No. 5 of 2005 specifies the methodology for determination of transmission tariff. It is proposed to continue with the same methodology in the draft TSERC MYT Regulation, 2023 for long-term and medium-term Users. For short-term users of the transmission system, it is proposed to determined the transmission tariff in "Rs./kWh" terms based on the energy handled by the transmission licensee.

#### 6.6 Operation and Maintenance expenses for Transmission

Clause 12 of the Regulation No. 5 of 2005 specifies the methodology for determination of normative O&M expenses. It is proposed to specify uniform methodology for determination of normative O&M expenses for generation business, transmission business, distribution business and SLDC and therefore, the methodology for determination of normative O&M expenses has been specified on similar lines of methodology specified for generation.

### 7 Norms and Principles for Determination of Revenue Requirement and Wheeling Charges for Distribution Wheeling Business

The distribution licensees in the State of Telangana are responsible for distributing electricity from Transmission to Distribution (T<>D) interface points to individual consumer premises using the distribution network. The business of owning and operating this distribution network is called as Distribution Wheeling Business.

#### 7.1 ARR for Distribution Wheeling Business

The draft TSERC MYT Regulation, 2023 specifies the components of the Aggregate Revenue Requirement (ARR) of the Distribution Wheeling Business to be recovered through Wheeling Charges, as under:

- a) Operation and maintenance expenses;
- b) Depreciation;
- c) Interest and finance charges on loan;
- d) Interest on Working Capital;
- e) Return on Equity;

#### minus:

- f) Income from Open Access charges;
- g) Non-Tariff Income; and
- h) Income from Other Business;

#### Add:

i) Impact of true-up for prior period as approved by the Commission.

#### 7.2 Separation of Accounts for Wheeling and Retail Supply Businesses

Any person availing Open Access under Section 42 of the Act, shall pay Wheeling Charges for using the Distribution Licensee's network. Further, as per Clause 7 of the Regulation No. 4 of 2005, the Wheeling Tariffs shall have to be filed separately. Clause 5 of the Regulation No. 4 of 2005 specifies the segregation of accounts into Wheeling and Retail Supply Businesses and till such time there is complete segregation of accounts, the ARR for each business shall be supported by an Allocation Statement that contains the apportionment of costs and revenues to that business.

Presently, the components of ARR namely power purchase cost, transmission charges, load dispatch charges and supply margin are being allocated fully to Retail Supply Business and the other components of ARR namely Operation and

Maintenance charges, depreciation etc. are being fully allocated to Wheeling Business. The Commission has specified an allocation matrix in the draft TSERC MYT Regulation, 2023 till such time there is complete segregation of accounts into Wheeling and Retail Supply Businesses.

#### 7.3 Operation and Maintenance Expenses for Wires Business

Clause 14 of the Regulation No. 4 of 2005 specifies that the O&M expenses shall be determined by the Commission based on submissions of the distribution licensee, previous years actual expenses and any other factors considered relevant by the Commission. It is proposed to specify uniform methodology for determination of normative O&M expenses for generation business, transmission business, distribution business and SLDC and therefore, the methodology for determination of normative O&M expenses has been specified on similar lines of methodology specified for generation.

# 8 Norms and Principles for Determination of Revenue Requirement and Tariff for Retail Supply Business

The Retail Supply Business of a Distribution Licensee is the business where the Distribution Licensee has a contract with the consumer for supply of electricity and enters into power purchase contracts for the required quantum of electricity.

#### 8.1 ARR for Retail Supply Business

The draft TSERC MYT Regulation, 2023 specifies the components of the Aggregate Revenue Requirement (ARR) of the Retail Supply Business to be recovered through Retail Tariffs, as under:

- (a) Power purchase expenses;
- (b) Inter-State Transmission Charges;
- (c) Intra-State Transmission Charges;
- (d) SLDC Charges;
- (e) Operation and Maintenance expenses;
- (f) Depreciation;
- (g) Interest and finance charges on loan;
- (h) Interest on working capital;
- (i) Interest on consumer security deposits;
- (j) Return on Equity Capital;

#### minus:

- (k) Non-Tariff income;
- (I) Income from Other Business, to the extent specified in these Regulations;
- (m) Receipts on account of Cross-Subsidy Surcharge;
- (n) Receipts on account of Additional Surcharge:

#### Add:

(o) Impact of true-up for prior period as approved by the Commission:

#### 8.2 Power Procurement

The distribution (Supply) licensee purchases power from different sources either through long-term or medium-term Power Purchase Agreements (PPA) or through short-term contracts.

The Distribution Licensee is required to plan for its future requirement of power in the most effective way. The draft TSERC MYT Regulation, 2023 specifies that the licensees shall prepare power procurement plan for the Control Period and submit the same along with the MYT Petition for approval of the Commission.

As per Tariff Policy 2016, all future requirement of power shall continue to be procured by the distribution licensee through competitive bidding. Accordingly, it has been proposed that all future procurement of short-term or medium-term or long-term power shall be undertaken only through tariff based competitive bidding in accordance with Guidelines notified by the Government of India under Section 63 of the Act. It is also proposed that if the licensee proposes to procure the power by a process other than that specified by the Competitive Bidding Guidelines, it shall seek the approval of the Commission submitting all the relevant information as per the Regulation.

#### 8.3 Approval of Power Purchase Agreement/Arrangement

Section 86(1)(b) of the Act confers powers on the Commission to regulate the electricity purchase and procurement process of distribution licensees including the price at which electricity shall be procured from the generating companies or licensees or from other sources through agreements for purchase of power, for distribution and supply within the State. The Commission has been following the public consultation process for approval of power purchase proposals by the distribution licensee and it is proposed to continue with the same.

#### 8.4 Operation and Maintenance Expenses for Retail Supply Business

Clause 14 of the Regulation No. 4 of 2005 specifies that the O&M expenses shall be determined by the Commission based on submissions of the distribution licensee, previous years actual expenses and any other factors considered relevant by the Commission. It is proposed to specify uniform methodology for determination of normative O&M expenses for generation business, transmission business, distribution business and SLDC and therefore, the methodology for determination of normative O&M expenses has been specified on similar lines of methodology specified for generation.

### 9 Norms and Principles for Determination of SLDC Charges

The State Load Dispatch Centre (SLDC) is the apex body to ensure integrated operation of the power system in the State of Telangana. Section 32 of the Act confers various powers on SLDC and functions including the optimum scheduling and dispatch of electricity within the State, monitoring of grid operations, energy accounting, supervision and control over InSTS, etc.

Section 32 (3) of the Act stipulates that SLDC may levy and collect such fees and charges from the generating companies and licensees engaged in intra-State transmission of electricity as may be specified by the State Commission.

#### 9.1 ARR of SLDC

The Regulation No. 1 of 2006 specifies the methodology of determination of Annual Fee and Operating Charges of SLDC. Annual Fee has been specified to cover the repayment of principal and payment of interest on investments in a year, plus any residual capital cost of past investments. The Operating Charges have been specified to cover (i) employee cost, (ii) administration and general charges, (iii) repairs and maintenance expenses and (iv) any other relevant costs and expenses as deemed appropriate by the Commission. It is proposed to discontinue this approach and determine the ARR of SLDC covering the following expenses, for recovery of the same as SLDC charges:

- (a) Operation and Maintenance expenses;
- (b) Depreciation;
- (c) Interest and finance charges on loan;
- (d) Interest on working capital
- (e) Return on Equity;

#### minus:

- (f) Income from Open Access charges;
- (g) Non-Tariff income;

#### Add:

(h) Impact of true-up for prior period as approved by the Commission.

#### 9.2 Operation and Maintenance Expenses

Clause 14 of the Regulation No. 4 of 2005 specifies that the O&M expenses shall be

determined by the Commission based on submissions of the SLDC. It is proposed to specify uniform methodology for determination of normative O&M expenses for generation business, transmission business, distribution business and SLDC and therefore, the methodology for determination of normative O&M expenses has been specified on similar lines of methodology specified for generation.

#### 9.3 SLDC Charges

Clause 4 of the Regulation No. 1 of 2006 specifies the methodology of determination of Annual Fee and Operating Charges for SLDC. As it is proposed to allow recovery of ARR of SLDC through SLDC charges, the same has been specified accordingly in the draft TSERC MYT Regulation, 2023.