# Draft NEPRA Guidelines (Methodology and Process) for Determination of Distribution Margin and Distribution Tariff/ DUoSC

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In exercise of the powers conferred by Section 7(2)(i) of the Regulation of Generation, Transmission and Distribution of Electric Power Act, the Act read with other applicable documents, the National Electric Power Regulatory Authority (the Authority/ NEPRA), hereby issues the following guidelines to lay down the Methodology and Process for determination and approval of Distribution of Power Tariff.

#### PART 1

#### 1. INTRODUCTION

- 1.1. National Electric Power Regulatory Authority (the "Authority" / "NEPRA") was established under the Regulation of Generation, Transmission and Distribution of Electric Power Act, (the "Act") and one of its core functions is to determine, modify and revise tariff(s) for provision of electric power services. Section 31 of the Act read with other applicable documents provides the guidelines and parameters for determination, revision and modification of tariff. As per Section 31 of the Act, the Authority shall, in the determination, modification or revision of rates, charges and terms and conditions for the provision of electric power services, be guided by the national electricity policy, the national electricity plan and such guidelines as may be issued by the Federal Government in order to give effect to the national electricity policy and national electricity plan.
- 1.2. The amendments in the Regulation of Generation, Transmission and Distribution of Electric Power Act, 1997 passed by the National Assembly on 15<sup>th</sup> March, 2018 (published in the official Gazette on 30<sup>th</sup> April 2018) (the "Amendment Act"), resulting in new licensed activities in the electricity sector. One of the fundamental changes as per the Amendment Act is the introduction of a competitive subsector for sales to consumers (retail) by segregating the supply function as a separate license from the distribution license.
- 1.3. As per the Amended Act, under Section 21(2)(a), 'sale' of electric power to consumers has been removed from the scope of a 'Distribution Licensee' and transferred to 'Electric Power Supply Licensee'. As a consequence of the separation of supply function, the tariff of a distribution licensee covers the provision of distribution services, connections to distribution system and metering.
- 1.4. Consequent to the aforementioned amendments in the Act, the Authority determined separate tariff for Distribution and Supply functions of DISCOs. This also necessitated the requirement for bifurcation of existing Guidelines for determination of consumer end tariff (Methodology and Process), 2015, into guidelines for Distribution Margin & Distribution Tariff/ DUoSC and guidelines for Supply Tariff.

- 1.5. For the purpose of bifurcation of costs into Distribution and Supply of power functions, DISCOs have generally allocated the cost related to Power purchase price, Power Acquisition plan, billing, collection and customer related service etc. to their Supply of power function and the remaining costs, which primarily relate to their Network business, as part of Distribution of Power function. Costs of common services, are being allocated proportionately to Distribution and Supply of Power Function based on the ratio of their O&M costs. Accordingly, for the purpose of revenue requirement and tariff determinations for the distribution and supply functions, the Authority considered the bifurcation of costs as provided by DISCOs.
- 1.6. These Guidelines are being issued to lay down the Methodology & Process for determination of Distribution Margin and Distribution Tariff/ DUoSC. It is aimed to provide guidance to the relevant Distribution licensees with respect to their Distribution Margin and Distribution Tariff/DUoSC determination and the documents / information required to be submitted with the petition.

## 2. SHORT TITLE AND COMMENCEMENT:

- 2.1. These guidelines shall be called NEPRA Determination of Distribution Margin and Distribution Tariff/ DUoSC (Methodology & Process) Guidelines, 2024.
- 2.2. These Guidelines shall be applicable for determination of Distribution Margin and Distribution tariffs/ DUoSC for Distribution licensees.
- 2.3. These Guidelines shall be applicable with immediate effect.

#### PART 3

#### 3. <u>DEFINITIONS:</u>

- 3.1. In these guidelines, unless there is anything repugnant in the subject or context,
  - (a) "Act" means the Regulation of Generation, Transmission and Distribution of Electric Power Act, 1997 as amended from time to time;
  - (b) "Authority" means the National Electric Power Regulatory Authority (NEPRA);
  - (c) "Applicable documents" means the rules, regulations, terms and conditions of any licence, registration, authorization, determination, any codes, manuals, directions, guidelines, orders or notifications issued or approved under the Act;
  - (d) "Base Year" means the year on which the annual or multi-year tariff projection is being made. It may be a historical financial year, for which the provisional /actual results/ accounts are available. It may be a combination of actual results and projected results for the same financial year or it may be a pure projection of a future financial year.

(e)

- (f) "Distribution" means the ownership, operation, management or control of distribution facilities for the movement or delivery to consumers of electric power but shall not include the ownership, operation, management and control of distribution facilities located on private property and used solely to move or deliver electric power to the person owning, operating, managing and controlling those facilities or to tenants thereof shall not constitute distribution;
- (g) "Distribution Code" means the code as approved by the Authority, amended from time to time.
- (h) "distribution company" means a person engaged in the distribution of electric power;

- (i) "distribution facilities" means electrical facilities operating at distribution voltage and used for the movement or delivery of electric power;
- (j) "Distribution licensee" means a person to whom a license for distribution of electric power has been granted by the Authority under the Act;
- (k) "Distribution Investment Program" means the investment program prepared by the Distribution Company in accordance with these guidelines and other applicable documents, and approved by the Authority pursuant to the applicable documents;
- (l) "Distribution Margin" means the revenue requirement of distribution licensee comprising of operations & maintenance cost, return on regulatory asset base, depreciation, corporate tax, and other regulatory costs including other income, prior period adjustments etc., determined by the Authority.
- (m) "Petition" means a petition made to the Authority for the determination, modification or revision of rates, charges and terms and conditions for the provision of electric power services;
- (n) "Petitioner" means the distribution licensee, which files a petition for determination, modification and revision of its Distribution Margin, tariff, rates, charges and other terms & conditions.

(o)

- (p) "Registrar" means, a person designated by the Authority to register and record receipt of communications and petitions filed with the Authority and to perform such duties as may be assigned by the Authority from time to time;
- (q) "Test Year" means the first year of tariff control period in multiyear tariff regime.
- (r) "Tariff Control Period" means the time period as allowed by the Authority.
- (s) "Use of Distribution System" means use of distribution system of a distribution licensee, for movement or delivery of electric power; and
- (t) Distribution Use of System charges (DUoSC)/ Distribution Tariff" means the charges made or levied or to be made or levied by a Distribution licensee for the purpose of recovery of its Distribution Margin as determined by the Authority and notified from time to time; and
- (u) Prior Years Adjustment (PYA) means the under or over-recovery of the allowed Distribution Margin, based on approved regulatory targets during the previous year/

period, to be accounted for during the current year. This may also include impact of delayed notifications, true-ups, impact of under/over investments and any other adjustments as allowed in the Tariff.

3.2. Words and expressions used but not defined in these guidelines shall have the same meaning as in the Act and rules, regulations and other applicable documents.

#### 4. MINIMUM FILING REQUIREMENTS FOR THE PETITION

- 4.1. This part provides the minimum filing requirements for the Distribution licensee for determination of its Distribution Margin and Distribution use of system charges (DUoSC). The petitions filed hereunder shall be accompanied with such information as required under these Guidelines & information stipulated in the applicable documents and as required by the Authority.
- 4.2. Any petition, seeking determination of its Distribution Margin and Distribution Tariff / DUoSC and subsequent adjustments filed before NEPRA, shall be signed/sealed by the petitioner or its authorized representative and each page of the petition as well as annexure are to be initialed by the person filing the petition.
- 4.3. The petition for determination of Distribution Margin and Distribution Tariff / DUoSC shall be made in such manner and form as specified in the forms attached to these Guidelines. Provided that NEPRA may require any further information as deemed appropriate. NEPRA may amend any such forms as and when required.
- 4.4. The petition shall be accompanied with copy of necessary authorization in favor of the signatory by the board of directors of the petitioner.
- 4.5. The information incorporated in the petition shall be accurate and complete in all respects. The affidavit/ certification filed, as to correctness of the data in the petition, shall be sealed/countersigned by the person authorized to take oaths.
- 4.6. In case of any misrepresentation or incorrect information provided by the Petitioner, the Petitioner shall be responsible for the consequences arising out of any misstatement/misrepresentation under NEPRA Act, its Rules, Regulations and other applicable documents.
- 4.7. Beside the information required under the NEPRA Tariff (Standards & Procedure) Rules 1998 (The Rules 1998), the information prescribed herein as per forms attached with these Guidelines shall also be provided by the Distribution licensees along-with the petition.. NEPRA may amend any such form as and when required, provided that modified forms will not apply to petitions already submitted. Provided that the Distribution licensee shall be obligated to seek prior approval of its Distribution Investment Program including assessment of Transmission & Distribution (T&D) Losses, in accordance with the schedule established in these Guidelines. NEPRA may decline admission of any such petition upon failure of the Distribution licensee to seek prior NEPRA approval of Distribution Investment Program

- including assessment of Transmission & Distribution Losses , or failure to provide any of the given forms as prescribed herein.
- 4.8. NEPRA may decline admission of the Petition for Distribution Margin and Distribution Tariff/DUoSC, upon failure of the Distribution licensee to seek prior approval of Distribution Investment Program including assessment of Transmission & Distribution Losses from NEPRA or failure to provide any of the given forms as prescribed herein.
- 4.9. The checklist to the completeness of all requisite information shall be ensured by the office of Registrar while receiving the tariff petitions. Notwithstanding provision of the information being prescribed through these Guidelines, the Authority may call for any other required information to be filed and the admission of the petition could be refused by the Authority owing to non-filing of the requisite information. Since the distribution investment program including assessment of T&D losses of the Distribution licensee should have already been approved by NEPRA through separate proceedings, prior to filing petition, therefore, it is the responsibility of the Petitioner to ensure inclusion of the approved investment plan including T&D losses in its petition for the purpose of determination of its Distribution Margin and Distribution Tariff/ DUoSC.
- 4.10. Each Distribution licensee shall submit its petition with proper justification/documentary evidence and along-with forms attached with these Guidelines.
- 4.11. The petition submitted by the Distribution licensee shall be accompanied with the documents and information required in these Guidelines, or in the relevant applicable documents or such other information required by NEPRA, including in particular the following information:
  - (a) The Distribution Investment Program approved by NEPRA, along with its financing arrangements and completion timelines, and voltage wise level of approved T&D losses for the Tariff control period. The Distribution Investment Program shall be prepared and submitted for approval prior to the petition for determination of Distribution Margin and Distribution Tariff/ DUoSC as per the timelines provided in these guidelines.
  - (b) Break-up of the proposed Distribution Margin in terms of Operation & Maintenance Costs (including Pay & allowances, Repair & Maintenance etc.), return on equity, cost of capital for rate base, depreciation of rate base, corporate taxes, other expenses, and PYA etc.
  - (c) The details of pass-through items, if any.
  - (d) Detail workings of the Prior Year Adjustments (PYA)
  - (e) Company statistics as a Distribution Licensee
  - (f) The justifications (e.g. cost/benefit analysis and payback periods) for each of the costs recorded in the prescribed formats.

- (g) Comparison of requested Distribution Margin and Distribution Tariff/ DUoSC, with other Distribution licensees along-with month wise peak and average demand.
- (h) Distribution Licensee load factors and voltage wise cost of assets.
- (i) Asset register, identifying the total assets of the distribution licensee (break-up of each class of asset) and its liabilities, with clear break-up of consumer financed assets.
- (j) Detail of liabilities in terms of consumer security deposits & receipt against deposit works, and the available resources against such liabilities in terms of cash/ bank balances, stores & spares etc.
- (k) The details of immediately prior year's monthly and annual distribution losses along with break-up of technical and administrative losses and the losses approved by the Authority for future periods through the approved Distribution Investment Program.
- (l) The details of the immediately prior year monthly and annual transmission and distribution losses
- (m) Compliance statement with the directions passed by NEPRA from time to time.

#### PART-5

#### 5. FORMULAE AND PRINCIPLES FOR DETERMINING DISTRIBUTION MARGIN

- 5.1. This part of the Guidelines deals with the formulae and principles for determining the Distribution Margin for the Distribution licensee.
- 5.2. The Distribution Margin should allow the licensee the recovery of any and all cost prudently incurred to meet the demonstrated needs of distribution services to its customers.
- 5.3. The Distribution Margin should generally be calculated by including a depreciation charge and a rate of return on the capital investment of the Distribution licensee commensurate to that earned by other investments of comparable risk.
- 5.4. The Distribution Margin should allow the licensee a rate of return which promotes continued reasonable investment in equipment and facilities for improved and efficient service.
- 5.5. Different approaches will be used to determine each required block of costs in the Distribution Margin. Determination of cost of each block shall be governed by the principle of prudency.
- 5.6. The indicative formula for determination of the Distribution Margin of a Distribution licensee "D" shall be:

 $DM_D = RB_D*RORB_D + D_D + E_D + t_D \pm ORC_D \pm PYA_D$ 

Where:

Where:

DMD is the Distribution licensee's Distribution Margin

RBD is the Distribution licensee's eligible rate base

RORBD is the Distribution licensee's allowed cost of capital

D<sub>D</sub> is the Distribution licensee's eligible depreciation expense

E<sub>D</sub> is the Distribution licensee's eligible expenses including but not limited to operation, maintenance and human resources.

to is the Distribution licensee's eligible taxes (allowed as pass through)

ORC<sub>D</sub> is Distribution licensee's other eligible regulatory costs including taking into consideration other income.

PYAD is Distribution licensee's eligible Prior Year Adjustments

- 5.7. Base Year for the purpose of determining the Distribution licensee's Distribution Margin for annual or multi-year tariff regime, may be a past, current or future financial year as defined in the definition section of these guidelines for the purpose of determining the Distribution Margin.
- 5.8. The Distribution Licensee shall not earn on any pass-through cost.
- 5.9. The Distribution Margin of the Distribution licensee shall be calculated using the submitted data and information as per NEPRA's direction. The information provided along with the Petition should be complete for the determination of the Distribution Margin, and any additional data and information may be obtained during the revenue requirement assessment phase. The Petitioner shall be responsible for the consequences arising out of any misstatement/ misrepresentation incorrect information provided, under NEPRA Act, its Rules, Regulations and other applicable documents.
- 5.10. "Used and useful" shall govern the determination of the rate base.
- 5.11. Original / historical cost method shall be used for calculation of rate base, without accounting for impact of any revaluation.
- 5.12. Cost of capital may be different for each Distribution licensee.
- 5.13. Investments carried out by a Distribution licensee beyond the allowed investment program would be considered as imprudent investment and, shall not be included in the rate base for the purpose of determining the Distribution Margin, unless the Distribution licensee gets the same approved from the Authority.
- 5.14. Allowed T&D losses, as approved by NEPRA, shall be included in the determination of Distribution Use of System Charges of the petitioner either under annual or multi-year tariff regime.
- 5.15. "Other regulatory cost" as indicated in the formulae shall not be a candidate for "pass-through" status, and would be subject to the principle of prudency.
- 5.16. Cost of incentive-based rewards or penalties may be included in the determination of the Distribution Licensee's Distribution Margin /DUoSC.
- 5.17. In case of inconsistencies or any other significant questions, NEPRA has the authority to reject the requested Distribution Margin in its entirety with the corresponding justification and require the re-submission of the requisite information to address issues identified that caused the rejection. NEPRA shall not be obligated to guarantee the recovery of the approved Distribution Margin, rather the Petitioner would be provided with the opportunity to recover the approved Distribution Margin *via* the application of the NEPRA-determined DUoSC.
- 5.18. The approval of Distribution Investment Program along-with determination of T&D losses shall be undertaken in separate regulatory proceedings prior to the submission of the

Distribution Margin and DUoSC petition and will be processed by NEPRA Technical department. The principles for revision of base cost and calculation/indexation of various cost components of the approved investment shall be clearly stipulated in the approved Distribution Investment Program determination, based on which NEPRA Technical department would process for adjustment/indexation of the allowed investment amounts.

- 5.19. NEPRA approved Distribution Investment Program shall form the basis for investments and expansion of the distribution facilities and shall contain the complete details of the construction, financing and other activities for the tariff control period. The Distribution licensee shall submit quarterly reports describing and justifying their actual investment for the purpose of monitoring subject to milestones submitted to and approved by NEPRA. The Distribution licensee shall submit details of the actual investments made during the year and the actual transfer of assets from Capital Work in Progress (CWIP) to Gross Fixed Assets in Operation (GAIA) for making adjustments to the relevant components of the Distribution Margin.
- 5.20. Costs reported by the petitioner for a base year selected for the preparation of annual /multi-year tariff shall be subject to audit and verification.
- 5.21. Distribution licensee would be allowed with the opportunity to recover the allowed Distribution Margin through Distribution Use of System Charges (DUoSC), based on a fixed rate i.e. Rs./kW/month or variable rate Rs./kWh or combination of both. Rate design mechanism would be decided by the Authority in the tariff determination of the Distribution licensee.

#### **COST CATEGORIES**

- 5.22. A revenue cap approach will be used to determine the Distribution Margin for the Distribution Licensee. The data and information for this purpose will be provided by the Distribution Licensee in accordance with these Guidelines and other applicable documents.
- 5.23. The information provided by the respondents, interveners, commentators or otherwise available with NEPRA may also be considered during the course of tariff proceedings.
- 5.24. The components of the Distribution Margin will include, but will not be limited to, the rate of return on rate base, depreciation and costs of operations, maintenance, repairs, salary, wages, benefits, travel, vehicles and other costs. as described in these Guidelines. The distribution company will account for these costs in the following manner.

#### (i) Rate-of-return on rate base

a) Average net fixed assets on original/ historical cost basis, construction/ capital work in progress (CWIP) (Excluding IDC) and deferred credits including share of deposit works

valued at original cost and/or expected cost shall be used to determine the rate base of the Distribution Licensee.

b) The return on rate base may be Weighted Average Cost of Capital (WACC) that may be determined using the principles of comparative risk. For determining return of equity, the Authority may link the tenure of risk-free debt instrument with the control period of tariff plus a market premium determined by NEPRA. The equity component of the WACC may be calculated in accordance with Capital Asset Pricing Model (CAPM) or the principles of comparative risk. A minimum of twenty percent (20%) equity will be assumed when there is negative equity. Equity in excess of thirty percent (30%) may be considered as debt.

#### (ii) Depreciation Expense

Depreciation expense may be determined on the basis of Gross Fixed Assets in Operation on Original/ historical cost basis, including new investment, in a manner consistent with the base year.

#### (iii) Operations, Maintenance and Repairs Expenses

Operations, maintenance and repair expenses shall be determined in accordance with the principle of "prudence" and will include the costs of scheduled maintenance and operations' performance enhancement. Under multi-year tariff regime this cost will be adjusted up or down, during the control period in accordance with the mechanism attached with these guidelines. However, under annual tariff regime, the same would be assessed on yearly basis, on a criteria as deemed appropriate by the Authority. The said criteria and rationale would be described and justified in the petition and discussed in the tariff determination of the Distribution licensee.

## (iv) Salary, Wages & Other Benefits

- a. The cost of salaries, wages and benefits may be determined in accordance with the principle of "prudence". In the case of government owned Distribution Licensee, known budgeted increases and automatic annual increments in salaries, wages and other benefits as applicable may be included in the Distribution Margin for such employees who have been hired on GoP scales. Trends in salaries, wages and benefits will be monitored continuously regardless of the selection of the base year. Specific procedures will be applied to the treatment of salaries, wages and benefits for new recruits.
- b. Post-retirement benefits may be allowed keeping in view the actual payments made by the Distribution licensee or as per the provisions for post-retirement benefits appearing in its financial statements or as per the actuarial valuation report.

c. The procedures for new recruits and post-retirement benefits, would be discussed and respective directions would be issued by NEPRA to the Distribution licensees in this regard from time to time.

## (v) Other expenses including Travel, Transportation and other miscellaneous expenses

Other expenses including travel, transportation, and other miscellaneous (misc.) expenses may be determined in accordance with the principle of "prudence". All these expenses will be monitored to identify trends. The Petitioner shall provide complete break-up of costs requested as "Other/ Misc. expenses".

#### (vi) Other Income

Other income may be considered to be a negative other cost. Other Income / negative other cost may include, but not be limited to, amortization of deferred credit, meter and rental income, late-payment surcharges, profit on bank deposits, sale of scrap, income from non-distribution operations, and miscellaneous income etc. Other income will be monitored to identify trends.

## (vii) Prior Year Adjustments

Under-recovery or over-recovery of the allowed Distribution Margin based on approved regulatory targets during the previous year/ period shall be accounted for going forward during the current year under the head of prior year adjustment. This may also include impact of delayed notifications and impact of under/over investments etc.

## 6. SCHEDULE OF PETITION AND TARIFF DETERMINATION PROCESS

6.1. Subject to the applicable documents, the following schedule shall be adhered to by the Distribution Licensee for the submission and processing of its Distribution Investment Program, and subsequent Distribution Margin and DUoSC petition:

## **Distribution Investment Program**

6.2. Distribution Licensee is required to prepare and file its Distribution Investment Program, on annual or on multi-year basis, including projects in its license service area, considering the latest distribution plan, spatial demand forecast, priority expansions for licensee harmonized with IGCEP, TSEP and underlying costs. The following schedule shall be adhered to and taken into consideration by the Distribution Licensee for submission and processing of its Distribution Investment Program.

#	Description	Date
1	Submission of Distribution investment program including T&D losses targets and other performance benchmarks, in accordance with the Distribution Code, and other applicable documents.	September 1 <sup>st</sup> of each year
2	Approval of Distribution Investment Program including T&D losses targets and other performance benchmarks by NEPRA. This step would include approval of investment program for each distribution company. The same would be submitted with the tariff petition along with actual results of investments already carried out by a distribution company under the same approved plan.	November 30 <sup>th</sup> each year

## **Tariff Petition Proceedings**

- 6.3. The Petitioner shall submit its petitions for the determination of an annual or an annual or multi-year Distribution Margin and DUoSC along with the information prescribed in these Guidelines.
- 6.4. The Petitioner shall submit a complete financial analysis for the test year along with the information prescribed in these guidelines.
- 6.5. The Petitioner shall determine the financial impact on a class of customers that is affected by a change in the rate structure, change in the rate levels or a change in the annual or multi-year DUoSC terms and conditions.

- 6.6. Subject to the applicable documents, the Petitioner shall submit the required information as being prescribed through these Guidelines. The Petitioner shall submit the monthly T&D losses report with other performance benchmarks for monitoring of performance.
- 6.7. As per the existing procedure of tariff determination, the Distribution licensee files a petition for determination of its Distribution Margin/ DUoSC with NEPRA. Upon admission of such petition by the Authority, the salient features of the petition are published in the national newspapers inviting comments/ intervention requests from any interested persons/ stakeholders. Subsequently a public hearing is also held for which separate notices are also published in the national newspapers. Any interested person has the opportunity to raise the objections consequent to the notice of admission as well as to participate in the hearing process. After considering the submissions of the petitioners, commentators and interveners if any, evidence produced, arguments raised by respective parties, the determination of the Distribution Margin and DUoSC is issued by the Authority.
- 6.8. The following schedule shall be adhered to by the Distribution Licensee for submission and processing of its Distribution Margin and DUoSC Petition.

	Proceedings for Tariff Determination				
1	Submission of Tariff Petition along-with required documents (Complete in all respects) based on approved investment program and T&D loss targets.	January 31 <sup>st</sup> each year			
2	Revise minimum filing requirements (if necessary)	As required from time to time			
5	Admission of tariff petition	Within 15 days from date of submission			
6	Issuance of decision of admission/minutes of meeting	Within 04 days from date of meeting considering admission			
7	Publication of notice of admission / hearing	Within 03 days from date of admission			
8	Receipt of replies, comments or intervention requests	Within 07 days of publication			
9	Filing of rejoinder, if any,	Within 07 days of filing of reply, comments etc.			
10	Framing of draft issues for hearing and approval by the Authority	Within 07 days of receipt of input from in-house NEPRA professionals and from other stakeholders			
14	Conduct of hearing	Within 20 days from the date of approval of issues			
15	Close of Evidence, information directions etc.	Within 10 days of the conduct of last hearing			
16	Report on tariff petition	Within 30 days of close of evidence			
17	Authority meeting to discuss the Report	Within 07 days of submission of the Report			
18	Issuance of Minutes of Meeting of the Report	Within 04 days of meeting			
19	Authority's draft determination based on the minutes of meeting of the Report	Within 15 days of minutes of meeting			
20	Vetting by Legal Section	Within 05 days of circulation of draft determination			
21	Signature and issuance of Determination	Within 05 days of legal vetting			
22	Intimation of Determination to the Federal Government for notification	Within 03 days of signatures upon determination			

- 6.9. Scheduling should minimize the time required to determine and notify an annual or multiyear Distribution Margin and DUoSC. NEPRA may schedule the time required to complete the determination within the four-month time period as per the NEPRA Act, which states that, time frame for determination by the Authority on tariff petition shall not exceed four months after the date of admission of the tariff petition. However, the said clause is only directory in nature, therefore, any additional time period required by the Authority to carry out its proper due diligence of the petition, shall not be admissible for any cost.
- 6.10. In case the approval Distribution Investment Program is delayed, the time lines for determination of tariff petition would change accordingly.

## 7. SCHEDULE OF TARIFF

- 7.1. The Petitioner would be granted an annual or multi-year DUoSC that provides an opportunity to the Petitioner to fully recover the NEPRA approved Distribution Margin based on allowed regulatory targets.
- 7.2. The Distribution licensee would be allowed with the opportunity to recover the allowed Distribution Margin through Distribution Use of System Charges (DUoSC), based on a fixed rate i.e. Rs./kW/month or variable rate Rs./kWh or combination of both. Rate design mechanism would be decided by the Authority in the tariff determination of the Distribution licensee. The DUoSC shall apply to all users of the distribution system.
- 7.3. T&D losses beyond the allowed level, approved by NEPRA would be borne by the Distribution licensee.
- 7.4. The determination of the Authority along with relevant Annexes, if any, shall be intimated to the Government of Pakistan for notification in the official gazette in terms of section 31 of NEPRA Act. The Distribution Margin and DUoSC, once notified, shall remain effective until superseded by a new notification.
- 7.5. The determination of the Authority to be notified will contain all the directions issued by NEPRA to be implemented by the Distribution licensee.

#### 8. TARIFF METHODOLOGY

## **Intent of Tariff Methodology**

8.1. The Petitioner would be granted annual or multi-year DUoSC that provides an opportunity to the Petitioner to fully recover the NEPRA approved Distribution Margin based on allowed regulatory targets. The annual or multi-year Distribution Margin and DUoSC should recover the prudently incurred cost by the Petitioner.

## **DUoSC** methodology

8.2. Without the direction that would be provided by statute(s), regulatory order(s) or other documents with the force of law, the Petitioner shall be required to design distribution tariff/ DUoSC for each voltage level, to consider for each voltage level a percentage of the revenue requirement / DM (higher for lower voltage) trying to reflect assets required at each voltage level, and the level of losses in each voltage level.

## **Under/Over Recovery Procedures**

8.3. Under-recovery or over-recovery of the allowed Distribution Margin, based on approved regulatory targets during the previous year shall be accounted for going forward during the current year under the head of prior year adjustment. This may also include impact of delayed notifications and impact of under/over investments.

## Multiyear Tariff Methodology

- 8.4. A multi-year tariff has the potential to yield more predictable rate levels over time. A multi-year tariff may be less volatile and subject to fewer intra-period adjustments.
- 8.5. The objectives of the Multiyear Tariff may be as under:
  - (i) To increase the stability and predictability of the future revenue streams of the licensed and registered entities.
  - (ii) Allow and promote better planning of investment and financing needs, and strategic decision making.
  - (iii) To minimize the risks and costs of regulatory assessments by the Authority
  - (iv) Allows to bring efficiency in operation and maintenance expenses.

#### **ADJUSTMENT MECHANISMS**

## Regulatory Asset Base

	Rupees in Million	
Description	FY	FY
	Actual	Forward Looking
Opening fixed assets in operation (cost		
basis)		
Assets Transferred during the year		
Closing Fixed Assets in Operation		
Less: Accumulated Depreciation		
Net Fixed Assets in operation		
+ Capital Work in Progress (Closing net		
off Interest during construction, if any)		
Total Fixed Assets		
Less: Deferred Credit (including receipt		
against deposit works)		
Less: impact of investment, not allowed		
by the Authority		
Total	_	
Average Regulatory Assets Base		

## **RORB Adjustment**

RORB adjustment will be made in accordance with the following formula/mechanism:

$$RORB_{(Re \ v)} = RORB_{(Re \ f)} \times \frac{RAB_{(Re \ v)}}{RAB_{(Re \ f)}}$$

Where:

RORB<sub>(Rev)</sub> = Revised Return on Rate Base for the Current Year

RORB<sub>(Ref)</sub> = Reference Return on Rate Base for the Reference Year

 $RAB_{(Rev)}$  = Revised Rate Base for the Current Year

 $RAB_{(Ref)}$  = Reference Rate Base for the Reference Year

In addition the allowed RORB for previous year will be trued up based one actual investment (maximum cap to the extent of allowed investment) carried out during that year. Further KIBOR fluctuation may also be subject to adjustment.

## Adjustment Mechanism - Salaries, Wages & Other Benefits

Revised Salaries, Wages & Other Benefits Expenses

= Ref. Salaries, Wages & Other Benefits x [ 1+(GoP Increase or CPI or any other adjustment factor)]

Test year Salaries, Wages & Other Benefits may be considered as reference cost for future adjustment.

The Authority may consider to allow GoP increase till the time the DISCO remains in public sector. Otherwise CPI indexation or any other adjustment factor may be allowed if the DISCO has private sector participation (privatized). Such adjustment factor can be proposed by the Distribution licensee and shall be decided in the determination.

# Other expenses including Travel, Transportation and other Misc. Expenses Adjustment

These expenses part of Distribution Margin shall be indexed with CPI subject to adjustment for efficiency gains (X factor). Accordingly the O&M will be indexed every year according to the following formula:

$$O \& M_{(Re \nu)} = O \& M_{(Re f)} \times [1 + (\Delta CPI - X)]$$

Where:

 $O\&M_{(Rev)}$  = Revised O&M Expense for the Current Year  $O\&M_{(Ref)}$  = Reference O&M Expense for the Reference Year

 $\Delta$ CPI = Change in Consumer Price Index published by Pakistan Bureau of

Statistics.

Efficiency factor where X factor could be a percentage of the increase in N-CPI/CPI or any other percentage as deemed appropriate by the Authority. The Authority may consider to apply X factor either from the first year of tariff control period or from any other year of the tariff control period as deemed appropriate by the Authority, in order to provide the Petitioner with an opportunity to improve its operational performance, before sharing such gains with the consumers.

#### **Depreciation Expense**

Depreciation expense for the current year will be assessed in accordance with the following formula/mechanism:

$$DEP_{(\text{Re}\,\nu)} = DEP_{(\text{Re}\,f)} \times \frac{GFAIO_{(\text{Re}\,\nu)}}{GFAIO_{(\text{Re}\,f)}}$$

Where:

 $DEP_{(Rev)}$  = Revised Depreciation Expense for the Current Year

DEP<sub>(Ref)</sub> = Reference Depreciation Expense for the Reference Year

GFAIO<sub>(Rev)</sub> = Revised Gross Fixed Assets in Operation for the Current Year

GFAIO (Ref) = Reference Gross Fixed Assets in Operation for the Reference Year

In addition the allowed Depreciation for previous year will be trued up based one actual investment (maximum cap to the extent of allowed investment) carried out during that year.

#### Other Income

Other income for the current year will be assessed in accordance with the following formula/mechanism:

$$OI_{(\text{Re }\nu)} = OI_{(1)} + (OI_{(1)} - OI_{(0)})$$

Where:

 $OI_{(Rev)}$  = Revised Other Income for the Current Year

 $OI_{(1)}$  = Actual Other Income as per latest Financial Statements.

 $OI_{(0)}$  = Actual/Assessed Other Income used in the previous year.