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1. Background

Section 166 (2) of the Electricity Act, 2003 (the Act) mandates the constitution of a forum of regulators by Central Government consisting of the Chairperson of the Central Electricity Regulatory Commission and Chairpersons of the State Electricity Regulatory Commissions. Accordingly, the Forum of Regulators was constituted by the Government of India vide its notification dated 16th February, 2005.

The functions to be discharged by the Forum of Regulators (FOR) are as follows:

- Analysis of the Tariff Orders and other Orders of Central Electricity Regulatory Commission and State Electricity Regulatory Commissions and compilation of data arising out of the said Orders, highlighting, especially the efficiency improvements of the Utilities;
- Harmonization of regulation in the power sector;
- Laying of Standards of Performance of licensees as required under the Act.
- Sharing of information among the members of the Forum on various issues of common interest and also of common approach.
- Undertaking research work in-house or through outsourcing on issues relevant to power sector regulation;
- Evolving measures for protection of interest of consumers and promotion of efficiency, economy and competition in power sector; and
- Such other functions as the Central Government may assign to it, from time to time.

As depicted above, one of the major responsibilities of the Forum is harmonization, coordination and ensuring uniformity of approach amongst the Electricity Regulatory Commissions across the country, in order to achieve greater regulatory certainty in the electricity sector. Accordingly, the FOR, appreciating the need to recognize Regulatory Accounts as distinct from Statutory Accounts and the requirement for uniformity of approach on Regulatory Accounts, has constituted a Working Group on "Standardization of Regulatory Accounts".

In this context, FOR has engaged the consortium of ABPS Infrastructure Advisory Private Limited (ABPS Infra) and Sanjay Gupta and Associates (SGA) for providing assistance to the aforesaid Working Group on "Standardization of Regulatory Accounts".

2. Broad Objective of the Study

The objective of the study, as outlined by the Forum of Regulators (FOR), is as under:

- Need to recognize Regulatory Accounts as distinct from Statutory Accounts;
- Need for uniformity of approach on Regulatory Accounts;
- Make recommendations suggesting standardized principles for Regulatory Accounts

3. Terms of Reference

The Terms of Reference for this study are as under:

<u>General</u>

To analyse present system of Accounting followed by ten (10) different entities in power sector (entities to be mutually selected in consultation with FOR Secretariat)

- To analyse the requirement of Regulatory Accounting Guidelines
- To analyse the Gap
- To harmonise the present system of Accounting with Regulatory Accounting Guidelines

Development of:

- Uniform Regulatory Accounting Manual
- Charts of accounts
- Accounting Policies and Rules including the treatment of Regulatory Assets and Liabilities
- Reporting System
 - A. Summary of technical and financial particulars
 - B. Balance Sheet
 - C. Profit and Loss Accounts
 - D. Notes to Accounts
 - E. Cash Flow Statements
 - F. Relevant Schedules

Separation of Accounts

- To develop methodology for separation of accounts
- To develop the basis for allocation and apportionment of various elements of revenue, cost assets and liabilities to regulated and non-regulated business.

4. Approach Adopted for Development of Reporting System

ABPS Infra and SGA made a detailed presentation to the FOR Secretariat on the Approach and Methodology to be adopted for the assignment on July 27, 2010. In this meeting, 10 power sector entities were selected, whose accounting systems were to be studied and the gap between requirements of Audited Accounts of the Utilities and requirements of Regulatory Accounts was to be ascertained. The entities were selected based on the following criteria:

- a. <u>Functional Segregation:</u> Generation, Transmission, Distribution
- b. Geographical Region: East, West, North, South
- c. <u>**Ownership:**</u> Public Sector Company, Private Sector Company, Electricity Department, Municipal Undertaking
- d. <u>Business:</u> Utility having only Regulated Business, Utility having Regulated as well as Unregulated Businesses

The selected entities are listed below:

Sl. No.	Name of Utility	Type of Utility	Ownership	State/Region
1	Gujarat State Electricity Company Limited (GSECL)	Generation	Public	Gujarat/Western
2	GujaratEnergyTransmissionCompanyLimited	Transmission	Public	Gujarat/Western
3	Madhya Pradesh Generation Company Ltd. (MPGENCO)	Generation	Public	Madhya Pradesh/Western
4	Orissa Power Transmission Corporation Ltd. (OPTCL)	Transmission	Public	Orissa/Eastern
5	Eastern Power Distribution Company of Andhra Pradesh Limited (APEPDCL)	Distribution	Public	Andhra Pradesh/Southern

Sl. No.	Name of Utility	Type of Utility	Ownership	State/Region	
6	DakshinHaryanaBijliVitranNigamLtd(DHBVNL)	Distribution	Public	Haryana/Northern	
7	BSES Rajdhani Power Limited (BRPL)	Distribution	Private	Delhi/Northern	
	Brihan-Mumbai Electricity	Deemed	Municipal		
8	Supply and Transport	Distribution	undertaking/	Mumbai/Western	
	Undertaking's (BEST)	Licensee	local authority		
		Regulated as			
9	The Tata Power Company	well as	Private	Mumbei /Mestern	
9	Ltd.	unregulated	rnvate	Mumbai/Western	
		business			
10	Government of Goa	Transmission	Public	Cae /Masterra	
10	Electricity Department	& Distribution	i ublic	Goa/Western	

After carrying out visits to first 5 entities and post study of accounting principles followed by these 5 entities, ABPS Infra and SGA made a presentation before the FOR Secretariat on September 22, 2010 detailing the gap between accounting principles used for preparation of Audited Accounts by the Utilities and accounting principles required to be used for preparation of Regulatory Accounts by the Utilities. Subsequently, a report titled "Study on Standardisation of Regulatory Accounts – Gap Analysis" was submitted to the FOR Secretariat. After studying the Report, FOR Secretariat intimated their suggestions and comments to ABPS Infra and SGA. Accordingly, changes were made in the report and the Final Report on Gap Analysis was submitted to FOR Secretariat.

ABPS Infra and SGA visited the rest of the entities selected. Based on the visits, a presentation was made to FOR Secretariat on January 31, 2011, covering the following:

- a. Regulatory Accounts: Regulations of Other Entities-TRAI, IRDA
- b. Regulatory Accounts : International Experiences
- c. Separation of Accounts : Need, Principles & Methodologies
- d. Regulatory Assets/Liabilities Accounting Policies & Rules
- e. Regulatory Accounting Manual Coverage
- f. Chart of Accounts Principles
- g. Reporting System Financial and Technical

h. Implications of IFRS on Indian Power Sector

The Draft Report on Regulatory Accounts along with the formats were submitted to FOR Secretariat on March 11, 2011. Consequently, a presentation on Regulatory Accounts covering inter-alia, the Accounting Manual, Allocation Principles and Charts of Accounts was made before the FOR Secretariat on February 14, 2012. FOR Secretariat directed ABPS Infra and SGA to undertake a mock-run of the Regulatory Accounts for an Integrated Utility like TPC and NTPC at the Central level using the suggested apportionment principles. The revised report on Regulatory Accounts along with the revised formats was submitted to FOR Secretariat on April 14, 2012. Another presentation on the Regulatory Accounts and mock-run of Regulatory Accounts of TPC and NTPC was made before FOR Secretariat on July 04, 2012, wherein FOR Secretariat had invited representatives of Madhya Pradesh Electricity Regulatory Commission (MPERC) and Gujarat Electricity Regulatory Commission (GERC) as special invitees.

Based on the inputs and suggestions received during the above meeting on July 4, 2012, ABPS Infra and SGA are pleased to submit the Final Report and the Formats for Regulatory Accounts.

5. Reporting System

5.1. Short title, extent and commencement

- a. This Reporting System shall be called "The Reporting System on Power Regulatory Accounting -2012".
- b. This Reporting System shall apply to every entity, which is engaged in any one or more of the following activities, namely:
 - Regulated Utilities engaged in Transmission and Distribution of electricity set up under the Indian Electricity Act, 1910, the Electricity (Supply) Act, 1948 and the Electricity Act, 2003, as well as Generation Utilities, to the extent these are supplying power to the afore-mentioned Regulated Entities, and are regulated by the appropriate ERC.
 - ii. Departmentally run State Government Undertakings, i.e., State Electricity Departments.
 - Entities set up under special Acts, such as Damodar Valley Corporation set up under the Damodar Valley Corporation Act, 1948 and Bhakra Beas Management Board set up under the Punjab Re-organisation Act, 1966.

- c. This Reporting System shall extend to the whole of the State of (Name of the State) and to all matters within the jurisdiction of the(Name of State Commission) /shall apply to Generating Companies supplying power to more than one State and Transmission Licensees wheeling electricity in more than one State and regulated by the Central Electricity Regulatory Commission.
- d. This Reporting System shall come into force from the date of their publication in the Official Gazette.

5.2. <u>Applicability of the Reporting System</u>

The Reporting System shall be applicable to all Licensees and Generating Companies, and where any Licensee also undertakes business of generation of electricity and who submits application for determination of tariff under Section 64 of the Act or application for annual performance review under applicable Tariff Regulations notified by the appropriate Commission.

5.3. <u>Definitions:</u>

In these Regulations unless the context otherwise requires:

- 1. "Act" means the Electricity Act (36 of 2003), including amendments thereto.
- 2. "Accounting Statement/Annual Accounts" means for each financial year, the following statements, namely
 - i. Balance sheet, prepared in accordance with the form contained in Part I of Schedule VI to the Companies Act, 1956;
 - ii. Cash flow statement, prepared in accordance with the Accounting Standard on Cash Flow Statement (AS-3) of the Institute of Chartered Accountants of India;
 - iii. Cost records prescribed by the Central Government under Section 209(1) (d) of the Companies Act, 1956;
 - iv. together with notes thereto, and such other supporting statements and information as the appropriate Commission may direct from time to time;
 - v. Profit and loss account, complying with the requirements contained in Part II of Schedule VI to the Companies Act, 1956;
 - vi. Report of the statutory auditors;

Provided that in case of any local authority engaged in the business of distribution of electricity, the Accounting Statement shall mean the items, as

mentioned above, prepared and maintained in accordance with the relevant Acts or Statutes as applicable to such local authority.

3.Audit

- a. Every service provider, to which these Regulations apply, shall appoint an auditor who is qualified for appointment as an auditor under section 224 or 233-B of The Companies Act, 1956.
- b. The auditor shall audit the reports so prepared.
- c. The auditor in his report shall express an opinion as to whether the reports have been properly drawn in accordance with the regulation and he has received all information and explanation necessary for the purpose of audit.
- 4. "**Licensed Business**" means as defined in the Distribution Licence Regulations and Transmission Licence Regulations notified by the appropriate Commission.
- 5. "**Regulatory Accounts**" means the regulatory accounts duly audited by the auditor within the meaning of (c) above, of the Licensees Companies that contain all the financial and non-financial information including the filled up formats appended to this Reporting System and cover the activities which includes without limitation the Statutory Accounts prepared under Companies Act, 1956 or any other law applicable to the Utility;
- 6. **"Commission"** means The Appropriate (Central, State or Joint) Electricity Regulatory Commission.
- 7. **"Financial Accounting Year**" means the period coinciding with the financial year for the purpose of determination of tariff, i.e., the period commencing on April 1 of a calendar year and ending on March 31 of the subsequent calendar year.
- 8. "**Regulated Business**" means the business regulated by the appropriate Commission.
- 9. "**Other Business**" has the meaning in terms of Section 41 and 51 of the Electricity Act 2003

Words and expressions used herein and not defined shall have the meaning assigned to them in the Act, Rules or Regulations.

5.4. <u>Preparation of Accounting Manual</u>

- a. Every Licensee Company shall make a manual containing the following-
 - 1. Definition of terms used in the manual;
 - 2. Introduction of the Utility
 - 3. An overview of the Utility's organizational structure;
 - 4. A clear categorisation of the regulated and unregulated activities of the Utility with further segregation of regulated activities covered under more than one Regulatory Commission;
 - 5. A list of the entities within the Group, relationship of the Utility with other Group Companies or Subsidiaries or related parties in terms of common resources, etc.;
 - 6. An overview of the financial accounting system, which may include policies relating to treating an expense item as major or minor, capitalization, depreciation, Return on Equity, security deposits, provision for bad and doubtful debts, apportionment of common assets, common liabilities, common expenses and common revenue, etc., with respect to the Regulatory Accounts;
 - 7. Description of the treatment of related party transactions, allocation of common expenses and allocation of jointly used assets;
 - 8. Products, Services or geographical areas which shall be treated as separate segments while preparing Regulatory Accounts;
 - 9. Segmentation of Regulated Business
 - a) Generation Hydro, Thermal, Renewable or any other;
 - b) Transmission
 - c) SLDC;
 - d) Distribution Wheeling & Retail Supply business and
 - e) Trading

(In case any of the above Regulated Business is carried out in more than one State, State wise segmentation of the Regulated Businesses shall be provided. Further, in case Transmission and/or Distribution of electricity is carried out under separate Transmission and/or Distribution Licences within the same State, Licence wise segmentation of Transmission and/or Distribution Business shall be provided).

10. Accounting System followed for each segment of the regulated business, report in Sl. No. 9 above, and recording of the accounting separation

information and reports, which may include list of cost and profit centres, linkages of financial heads to cost and profit centres;

- 11. Description of studies, surveys and model employed in cost apportionment and allocation process;
- 12. Procedure for maintenance and updating manual.
- b. The copy of the manual shall be filed before the appropriate Commission within a prescribed time frame from the date of publication of Regulations in this regard by the appropriate Commission. All subsequent changes in the manual, together with the reasons thereof also have to be submitted to the appropriate Commission.

5.5. <u>Periodicity of submission of Regulatory Accounts</u>

- a. The Licensee or the Generation Company shall submit the Regulatory Audited Accounts every year within seven months of the end of Financial Accounting year to the appropriate Commission in accordance with the formats appended to this Reporting System.
- b. The Reports referred to shall be submitted in hard copy and in soft copy in MS Excel format along with its formulae and linkage.
- c. The accounting year shall be same as followed by the entity for preparation of the annual financial accounts under sub section (4) of section 210 of the Companies Act, 1956.
- d. Provided that, if accounting year exceeds fifteen calendar months, the entity shall submit the reports in two parts one part comprising report of twelve month and the second part comprising of balance period.

5.6. <u>Audit</u>

- a. Every entity, to which this Reporting System applies, shall appoint an auditor who is qualified for appointment as an auditor under section 224 or 233-B of The Companies Act, 1956 to audit the reports prepared by the Entity under this regulation and obtain an Audit Report from the Auditor in the Annexure A specified to the Report. (attached to the end of the Report).
- b. The Auditor shall audit the Regulatory Accounting Reports prepared by the Entity.
- c. The Auditor in his report shall express an opinion as to whether the Regulatory Accounts have been prepared in accordance with the applicable Tariff Regulations as well as the Reporting System and he has received all information and explanation necessary for the purpose of audit.

5.7. Maintenance of Information

- a. Every Licensee or Generation Company shall maintain segregated financial, operational and accounting information with supporting vouchers and journal entries including Allocation Statement based on actual in respect of the Regulated Business and Other Business.
 - i. **Explanation 1:-**The accounting and reporting arrangements shall be maintained in such a manner that they can be verified at final accounts level. Data maintained in the formats as per the Appendix shall provide information in the most understandable manner, without sacrificing relevance or reliability.
 - ii. **Explanation 2:-** For normative figures in Regulatory Accounts, such as Interest on Working Capital, Interest on Normative Loans, if any, Depreciation, etc. the information as specified in the formats in the Appendix shall be maintained separately.
- b. Notwithstanding the above, the appropriate Commission may direct that further or more detailed information may be required to be maintained by every Licensee or Generating Company for their Regulated businesses.

5.8. <u>Basis of Preparation</u>

- a. Every Licensee or Generation Company shall prepare the Regulatory Accounts as per formats appended to the Reporting System under the Historical Cost Convention in accordance with the provisions of the Act and the Regulations notified by the appropriate Commission, Generally Accepted Accounting Principles in India, applicable Accounting Standards as notified by Institute of Chartered Accountants of India, and relevant provisions of the Companies Act, 1956 as well as Electricity (Supply) Annual Accounts Rules, 1985 if applicable. Where there is an inconsistency between the above mentioned principles, etc. and/ the Act or the Regulation notified by the appropriate Commission treatment of items in the Regulatory Accounts shall be given as per the Regulation notified by that appropriate Commission.
- b. The Licensee or Generation Company shall follow the Accounting Policies for Regulatory Accounts and the standard Chart of Accounts while preparing the Regulatory Accounts as per the formats appended to the Reporting System. In case the Profit & Loss Account and the Balance Sheet does not comply with any of the Accounting Standards, a disclosure to the effect shall be made in notes to accounts,

including the deviation from the Accounting Standard, reasons for such deviation and the financial effect of the same.

5.9. <u>Accounting Policies for Regulatory Accounts</u>

FIXED ASSETS

- a. Value of Fixed Assets shall be stated at cost or as per Government Transfer Scheme pursuance to unbundling of erstwhile State Electricity Boards, subject to adoption of the same by the appropriate Commission for the purpose of Tariff determination.
- b. In case of transfer of one entity to another, Fixed Assets shall be carried at Historic Cost/ cost allowed by the appropriate Commission.
- c. Addition to the fixed assets shall be stated at cost of acquisition or construction including any cost attributable to bringing the assets to their working condition for their intended use and actually put to use for the benefit of consumers (subject to certain exceptions like machine spares, etc.), as allowed by the appropriate Commission. The date on which the asset is put to use can be the Commercial Operation Date (COD) of the last Unit of the Generating Station for a Generation Company or the date of charging the asset with the rest of the network for a Transmission Licensee or a Distribution Licensee.
- d. The Generation Company or the Transmission Licensee shall separately indicate the addition of fixed assets in respect of renovation and modernization of fixed assets resulting in increase in life and/or efficiency of existing assets:

Provided that, where any special allowance has been claimed for renovation and modernization of any fixed asset, in accordance with any Regulations notified by the appropriate Commission, the Generation Company or the Transmission Licensee shall separately indicate the addition of fixed assets in respect of renovation and modernization of such fixed assets.

e. All Grants received from Central Government or State Government or any other source and Consumer Contribution received from consumers for capital expenditure shall be reduced from the value of fixed assets for the creation of which these funds have been used. In case the entire asset is funded out of such Grants or Consumer Contributions, then the fixed asset shall be shown in Regulatory Accounts at zero value. In case grants from Central Government or State Government or any other source are received for capital expenditure with caveats which require the Generation Company or the Licensee to achieve certain milestones, such grants shall be reduced from the value of fixed assets after achieving the milestones. Till that time, the full value of fixed assets shall be shown in the Regulatory Accounts.

- f. Optionally, if considered appropriate and necessary by the appropriate Regulatory Commission, the Generation Company or the Transmission Licensee shall also be required to provide the asset wise break up of cost (consisting of Base Cost, Interest During Construction, Incidental Expenditure During Construction and other cost, if any), asset wise liability incurred, asset wise accumulated depreciation charged till date, and asset wise depreciation charged in the Financial Accounting Year for the purpose of Regulatory Accounts.
- g. Fixed assets which do not have the approval of the appropriate Commission shall be shown separately in the fixed assets schedule. Appropriate justification for necessity of such fixed assets shall be given in the Notes to the Regulatory Accounts.
- h. The Generation Company or the Licensee shall capitalise assets to be charged at high voltage or extra high voltage after getting the certificate from the Electrical Inspector in accordance with Rule 63 of the Indian Electricity Rules, 1956. Rule 63 of the Indian Electricity Rules, 1956 is reproduced below:

"63. Approval by Inspector-

(1) Before making an application to the Inspector for permission [to commence or recommence supply after an installation has been disconnected for one year and above] at high or extra-high voltage to any person, the supplier shall ensure that the high or extra-high voltage electric supply lines or apparatus belonging to him are placed in position, properly joined and duly completed and examined. The supply of energy shall not be commenced by the supplier unless and until the Inspector is satisfied that the provisions of rules 65 to 69 both inclusive have been complied with and the approval in writing of the Inspector have been obtained by him..."

- i. Where the appropriate Commission has given year wise approval for capitalization in the beginning of MYT Control Period such amount shall be shown separately in the notes to the Regulatory Accounts.
- j. Amount of spares capitalized & its percentage in the cost of fixed assets shall be shown separately in the notes to the Regulatory Accounts.
- k. Un-discharged liability shall be shown in the Fixed Asset schedule.
- Variance analysis between the actual capitalization and the capitalization approved by the appropriate Commission shall be shown in a separate schedule/notes to schedule along with brief reasoning justifying the variance.

- m. In case of Generation Utilities, income from sale of infirm power prior to the date of commissioning, after accounting for the fuel charges (both primary fuel charges and secondary fuel charges) shall be reduced from Fixed Assets and the adjustment shall be shown in the fixed assets schedule.
- n. Amount of capitalisation carried out in pursuance to arbitration, court order, change in law shall be shown separately in notes to the fixed assets schedule.
- o. Details such as Gross block, depreciation for the year, accumulated depreciation and net block shall be provided for each of the above mentioned Items.
- p. Fixed assets common to more than one Business of the Licensee or Generation Company shall be apportioned between the different Businesses based on the Allocation Principles as appended to the Reporting System.
- q. Any expenditure on replacement, renovation and modernization or extension of life of old fixed assets shall be considered after writing off the gross value of such replaced/de-capitalised fixed assets from the original capital cost, except for the assets that have been entirely funded out of Grants or Consumer Contribution, where the original asset would be shown at zero value. The Equity portion attributable to replaced/de-capitalised in the Regulatory Accounts shall also be deducted. Specific debt, if any, outstanding corresponding to the replaced old asset shall be deducted from the debt outstanding in the Regulatory Accounts, to the extent set off by sale of the old replaced asset as scrap.

Note: Clause (f), as stated above, is optional and to be sought depending on the need for the same as considered appropriate by the appropriate Regulatory Commission.

CAPITAL WORK IN PROGRESS

The Capital Work in progress shall be stated at cost inclusive of all direct and proportionate overhead costs incurred.

DEPRECIATION

- a. Depreciation on fixed assets in the Regulatory Accounts shall be charged as per the Tariff Regulations notified by the appropriate Commission.
- b. All Fixed assets, except land, which is a non-depreciable asset, shall be depreciated up to 90% of the original cost, on straight line method, at rates prescribed under Tariff Regulations notified by the appropriate Commission.

- c. In case of fixed assets added during the year, pro-rata depreciation shall be allowed for the first year.
- d. Depreciation shall continue only till writing off of 90% of the original cost of the fixed asset or till the asset is permanently ceases to be in use, whichever is earlier.
- e. In case of replacement of an old asset, the accumulated depreciation corresponding to the asset shall also be deducted from the total accumulated depreciation. Proportionate adjustment in Cumulative Repayment shall also be made.

ADVANCE AGAINST DEPRECIATION

Advance Against Depreciation, if any, shall be shown in Regulatory Accounts in accordance with the appropriate provisions of Tariff Regulations.

EXPENDITURE ON PROJECT IDENTIFICATION, SURVEY AND FEASIBILITY STUDIES

- a. Expenditure incurred on identification, survey and feasibility studies of a project before the project is considered for sanction or rejection shall be accumulated in an account provided for this purpose.
- b. If the project is found infeasible, the full amount of expenditure shall be charged to revenue as in-fructuous capital expenditure in the year in which the project is rejected.
- c. If the project is found feasible, it shall be submitted to the appropriate Commission for approval. Upon approval of the appropriate Commission, the expenditure shall be charged to Capital Work-in-Progress account for that project. Any expenditure incurred on detailed feasibility studies etc. after a project is sanctioned shall also be charged to the Capital Work-in-Progress account for that project.
- d. The aggregate of the expenditure incurred before and after the sanction of the project shall be allocated to the assets capitalized under the project based on appropriate cost driver.

EXPENSES CHARGEABLE TO CAPITAL WORKS

All the expenses, such as Employee Expenses, Administration & General Expenses, Interest Expenses etc., in respect of construction of fixed asset shall be fully charged to the cost of fixed assets. At O&M-cum-capital location (where both capital and Operational & Management work is being carried out) only the following expenses shall be capitalized.

- a. Insurance on assets under construction.
- b. Legal charges and stamp fees in connection with agreement with capital suppliers/contractors.
- c. Fees payable to foreign technician for capital project.
- d. Expenses incurred for foreign technician for capital project.
- e. Technician documentation and design charges.
- f. Other consultancy charges directly related with project (which includes architectural fees)
- g. Power consumed for construction.
- h. Cost of hiring vehicles and equipments for the project
- i. Other costs directly related to the project

No part of any other administration and general expenses, which is related to Operation and Maintenance of existing assets, shall be charged to capital works.

CAPITALISATION OF DEPRECIATION:-

Depreciation on fixed assets used for construction of other assets (e.g. depreciation on vehicles transferred to a project, depreciation on building, furniture & fixtures, vehicles and office equipment at the construction division or construction circles) shall be charged to capital works.

NO CAPITALIZATION OF LOSSES

- a. The losses incurred such as irrecoverable advances to contractors, loss of assets or damage to assets at construction stage, shortage observed upon physical verification of stores at construction division, etc. during the construction of the fixed asset shall not be charged to the cost of fixed assets.
- b. Such losses shall be charged to the Profit and Loss Account for the year in which such losses are incurred.

LAND AND LAND RIGHTS

- a. All expenses incurred for bringing the land to a usable condition shall be charged to the cost of land. An indicative list of such expenses is as under:
 - i. Purchase price of land
 - ii. Compensation for acquisition of land
 - iii. Compensation for trees and crops on the acquired land
 - iv. Land charges, stamp duty, etc. incurred in order to secure effective title
 - v. Land revenue and other taxes paid during the stage of land development
 - vi. Site preparation cost such as cost of levelling hills or filling low spots, cost of cleaning trees, etc.
 - vii. Cost of demolishing as unwanted structure if the land is acquired with structure.

Cost of land improvement having a limited life such as cost of landscaping, gardens, sidewall, fences and digging shall also be added to cost of land as "cost of land development".

BUILDINGS

- a. All expenses incurred for bringing the building to usable condition shall be charged to the cost of building. An indicative list of such expenses is as under:
 - i. Purchase price,
 - ii. Expenses such as legal charges, stamps duty, etc., incurred for securing an effective title,
 - iii. Repairs, alteration and improvements to put building in usable condition,
 - iv. Architect's fees for remodelling, alteration, improvement before the building is first put to use,
 - v. Cost of obtaining permits, sanctioned plans occupation certificates from municipal or other bodies,
 - vi. Architectural fees,
 - vii. Insurance on uncompleted structure.
- b. Cost of constructed building shall include the following item:
 - i. Cost of construction comprising of materials, labour contractor charges and depreciation on construction machinery
 - ii. Surveying

- iii. Cost of obtaining permits, sanctioned plans occupation certificates from municipal or other bodies
- iv. Architectural fees
- v. Insurance on uncompleted structure
- vi. Cost of excavation (excavation is not a cost of land development).

REPAIR BEFORE COMMISSIONING OF ASSETS

All expenses incurred on repairs or rehabilitation of fixed assets (second hand or new) before capitalization shall be charged to the cost of fixed assets.

REARRANGEMENTS

All expenses on rearrangement (of plan layout, office layout etc.) shall be charged to revenue in the year in which the expenses are incurred.

REPLACEMENTS

Replacement can be defined as 'substitution of one fixed asset by another, particularly of old assets by new assets, or of an old part by a new part'.

- a. Expenses related to minor replacements shall be charged to revenue as Repair and Maintenance Expenses.
- b. Expenses related to major replacement shall be capitalized.
- c. The original cost of the replaced asset shall be withdrawn from the cost of total assets in Regulatory Accounts.
- d. For the purpose of Regulatory Accounts, the Generation Company or the Licensee shall follow the same criterion for distinguishing between major and minor replacement as followed in the Statutory Accounts.

PIECEMEAL REBUILDING

If an asset is rebuilt by replacement of its component over a period of time instead of at one time, the criteria fixed for 'minor' and 'major' replacements shall in such cases be applied to the aggregate of expenditure on replacement in an asset and accounted for accordingly.

CONTRIBUTION, GRANTS AND SUBSIDIES TOWARD COST OF CAPITAL ASSETS

All Grants received from Central Government or State Government and Consumer Contribution received from consumers for capital expenditure shall be reduced from the value of fixed assets for the creation of which these funds have been used.

FULL WRITE-OFF OF SMALL AND LOW VALUE ITEMS

- a. Full cost of all small and low value assets each costing Rs. 5000 or less shall be fully charged to revenue in the year in which the assets are put to use.
- b. No part of the cost of such item shall therefore be included in the cost of fixed assets nor shall any depreciation be charged thereon.
- c. The policy for full write-off stated shall not apply to items included under the classification 'furniture & fixtures' and 'office equipment'. The accounting policy for write-off of small and low value assets shall not apply to cost of granting each service connection.

PIECEMEAL BUILDING OF ASSETS

Assets may be completely built over a considerable period of the time rather than at one time. The cut-off criteria for write-off should in such cases be applied to the aggregate of expenditures and accounting for accordingly.

COMMISSIONING OF ASSETS

- a. All capital expenditure shall be accounted for through capital work-in-progress accounts.
- b. On commissioning of the assets, the expenditure shall be transferred to appropriate fixed assets account, subject to fulfilment of the conditions of the appropriate Commission, like getting necessary approvals required (like certificate from Electrical Inspector in case of assets charged at high voltage or extra- high voltage in accordance with Rule 63 of the Indian Electricity Rules, 1956) and other conditions in respect of expenditure and financing etc.

CAPITALIZATION WHEN ASSETS ARE FIRST PUT TO USE

Assets shall be capitalized when they are first put to use. The date on which the asset is put to use can be the Commercial Operation Date (COD) of the last Unit of the

Generation Station for a Generation Company or the date of charging the asset with the rest of the network for a Transmission Licensee or a Distribution Licensee.

a. ASSETS WHICH ARE 'COMMISSIONABLE' BUT NOT ACTUALLY COMMISSIONED

- (1) An assets which is installed/constructed and is in 'commissionable' state, but it is 'not commissioned/put to use' shall not be capitalized until it is actually put to use for the benefit of consumers, except in case of initial spares.
- (2) All costs incurred on capital assets (including costs incurred on maintaining the assets which are ready but await the actual commissioning) shall be charged to the cost of the assets.

b. NO WAITING FOR FINISHING TOUCHES

- (1) Cost of an assets incurred up to the stage of commissioning of the asset shall be capitalized when it is put to use for the benefit of consumers without waiting for any finishing touches which may not be significant in work and value.
- (2) Costs of such finishing touches when completed shall be accounted for and added to the cost of the assets capitalized earlier, subject to specific clauses of additional capitalization in the relevant Tariff Regulations of the appropriate Commission.

CAPITALIZATION REGARDLESS OF DISPUTES WITH CONTRACTORS

- a. Capitalisation shall be considered based on expenses incurred on capital assets that have been put to use, either on accrual basis or on cash basis, in accordance with the Tariff Regulations notified by the appropriate Commission.
- b. Disputes with contractors/suppliers regarding the fulfilment of the terms and conditions of contract with them shall not be permitted to withhold or defer capitalization of assets concerned, provided the asset is put to use for the benefit of consumers.
- c. Cost of the assets determined on the basis of the contract shall be capitalized by making necessary provision by the Licensee or the Generation Company, subject to specific clauses of additional capitalization in the relevant Tariff Regulations of the appropriate Commission.

ESCALATION CLAIM

Cost escalation claim made by suppliers and contractor shall be provided to the extent the claim is acknowledged by the Utility and cost of assets inclusive of such provision shall be capitalized when the asset is first put to use.

CAPITALIZATION OF SPARE UNIT/SERVICE UNIT

Assets which are to be classified as spare units or service units, as approved by the appropriate Commission shall be capitalized when they are 'put into usable condition' regardless of whether they are actually used or not.

DATE/VALUE OF ACQUISITION NOT KNOWN

- a. In case of asset scrapped or destroyed or sold for which the date of acquisition is not known, it shall be assumed, for the purpose of withdrawal of cost of asset and depreciation, that the asset concerned was the oldest asset of that type in use at that accounting unit.
- b. In case of asset scrapped or destroyed or sold for which the value of acquisition is not known, it shall be assumed, for the purpose of withdrawal of cost of asset and depreciation, that the salvage value of the scrapped or destroyed or sold shall be equal to the salvage value of a similar asset at that accounting unit at the time of scrapping the asset.

LOSS OF ASSETS

In the event of loss or destruction of assets, the cost of such assets and the accumulated depreciation attributable to such assets shall be withdrawn from the value of total fixed assets and total accumulated depreciation respectively. Cumulative Repayment shall also be adjusted.

WRITE-OFF OF LOSS

Excess of the written down value of the lost or destroyed assets over the amount of insurance claim granted shall be charged to revenue in the year in which the insurance claim is settled.

CAPITAL SPARES AT GENERATING STATIONS

- a. The capital spares at generating stations to the extent allowed in the Tariff Regulations notified by the appropriate Commission shall be treated as capital assets.
- b. No accounting shall be done at the time of issue of such spares for replacement in the generating plant.
- c. However, depreciation shall be charged on the total cost of the spares.
- d. Depreciation on such spares shall be charged as per the Tariff Regulations notified by the Appropriate Commission.

SPARE UNITS/SERVICE UNITS

- a. Depreciation on spare unit, installed with the approval of the appropriate Commission shall be charged in normal course as charged for the same type of assets which are in use.
- b. When the original units are removed for repairs or maintenance and the spare units are installed, no accounting adjustments shall be done.
- c. Expense on repairs or maintenance on the removed units shall be charged to revenue.
- d. No accounting entry shall be done either :

-when the removed unit is put back into usable condition or

-when it is actually used again in the place of some other units removed for repair or maintenance or

-the repaired unit is installed back in its place and the spare unit installed earlier is removed and brought back to stores.

- e. When the removed unit is considered irreparable, it will be considered to be a retired asset (if the estimated life is over) or scrapped assets (if estimated life is not over) and accordingly the subsequent accounting for retirement, scrapping and sale shall be done.
- f. Simultaneously with retirement/scrapping of the original unit, the cost and accumulated depreciation on the spare unit shall be transferred to fixed assets account.

TREATMENT OF INCOME FROM INVESTMENTS

a. Income from investment shall be credited to the revenue account for the year in which the income has accrued.

b. If the investments are held as earmarked investments against any fund such as pension fund, gratuity fund etc., the income from such investments shall be credited directly to the respective fund.

TIMING OF ACCOUNTING FOR REVENUE

- a. Revenue from sale of power shall be accounted for on accrual basis in cases whether the determination of retail tariff is done on the basis of distribution loss approach. In States where the Aggregate Technical & Commercial losses (AT &C) method is used for tariff determination, the revenue from sale of power shall be accounted for on cash basis.
- b. Reconciliation of actual collection, sales, and debtors shall be provided in the notes to the accounts.
- c. Where the sale of energy prior to the end of a Financial Accounting Year has not been billed, a provision for such unbilled revenue shall be made at the end of Financial Accounting Year so as to treat the amount as revenue in the Financial Accounting Year in which supply of power shall be made.

DISPUTED CLAIMS UNDER WARRANTY FOR REPAIRS

- a. Claims made for repair of capital equipments by Licensee or Generation Company to the suppliers or contractor of capital equipment for reimbursement of expenditure, if disputed, shall be fully charged to revenue account in the Financial Accounting Year in which the expenditure is incurred.
- b. Reimbursement when granted by the supplier or contractor of such capital equipment shall be credited to revenue account in the Financial Accounting Year in which the receipt of reimbursed amount is made.

CASH DISCOUNT

Cash discounts earned by the Licensee or the Generation Company on making timely or early payments to supplier/contractor shall be reduced from the cost of the assets.

INTANGIBLE ASSETS

Cost of Goodwill etc. shall not be considered for tariff determination in Regularly Accounts.

INVESTMENTS

- a. Investment and income there from made out of retained return on investment will not be considered in the regulatory accounts, unless they are re-invested in the regulated business.
- b. Income from Investments made against approved Contingency Reserve and from investments made out of Regulated Business shall be considered as Non Tariff Income in Regulatory Accounts.

EQUITY

- a. Where the actual equity including the retained profit invested in the Regulated Business is less then normative equity as per Tariff Regulations, actual equity shall be considered in the Regulatory Accounts.
- b. Where the actual equity including the retained profit invested in the business is more than normative equity as per Tariff Regulations, the difference between actual and normative equity shall be treated as normative loan and interest shall be allowed on the normative loan as per the Tariff Regulations of the appropriate Commission.

RETURN ON EQUITY OR CAPITAL EMPLOYED

Return on Equity / Capital Employed shall be shown in the Regulatory Accounts as per the appropriate provisions of Tariff Regulations:

Provided that where Return on Capital Employed is allowed by the appropriate Commission, interest on loans shall not be shown in Regulatory Accounts.

TAXES ON INCOME

In case the RoE/RoCE is allowed on post-tax basis:

- a. Income Tax paid or payable by the Licensee or the Generation Company, at actuals, on the income stream from the Regulated Business shall be considered in Regulatory Accounts.
- b. Income Tax on the amount of efficiency gains or incentives shall not be considered in Regulatory Accounts.

OR

In case the RoE/RoCE is allowed on pre-tax basis:

a. Income Tax shall be shown as a part of RoE or RoCE in the Regulatory Accounts and shall not be shown separately.

OPERATION AND MAINTENANCE EXPENSES

Operation and Maintenance Expenses shall be shown in Regulatory Accounts in accordance with the appropriate provisions of Tariff Regulations.

LEASEHOLD LAND

- a. Leasehold land is depreciated over the period of lease as per the terms and conditions of the Lease Agreement.
- b. Lease rental shall be charged to Profit & Loss Account under Administrative & General Expenses as payable, for the actual life of the Project..

LOANS/BORROWINGS

Under audited accounts, actual details of the loans are available based on the actual disbursement of loan and repayment made by the entity. However, in Regulatory Accounts the amount of loan approval depends upon the funding pattern approved by the appropriate Commission, subject to the Debt-Equity norm, which is further determined by the capital expenditure approval by the appropriate Commission. Where the actual details of loan are not available, the appropriate Commission usually allows the loans on normative basis including the period of loan and the repayment schedule which is invariably matched with the depreciation of the fixed asset for which the loan is availed. Very often, there are variations in the actual terms of loan as against the norms approved by the appropriate Commission including floating rate of interest, moratorium period of repayment, etc.

BORROWING COST

- a. Capitalization of Interest Expenses on loans shall be limited to the amount approved by the appropriate Commission.
- b. All Interest Expenses prior to capitalization of assets shall be considered as Interest During Construction (IDC) and shall be transferred to Capital Work in Progress (CWIP) corresponding to respective assets for capitalisation.

FOREIGN EXCHANGE RATE VARIATION

- a. This will be in accordance with the notified Tariff Regulations.
- b. In the absence of any specific provision in this regard in the Tariff Regulations notified by the appropriate Commission, the following approach shall be followed:
 - i. The Licensee or the Generating Company may hedge foreign exchange exposure in respect of the interest on foreign currency loan and repayment of foreign loan acquired for the licensed business or the generation business, in part or full in the discretion of the Licensee or the Generating Company.
- ii. Every Licensee or the Generating Company shall recover the cost of hedging of foreign exchange rate variation corresponding to the foreign debt, in the relevant year on year-to-year basis as expense in the period in which it arises and extra rupee liability corresponding to such foreign exchange rate variation shall not be allowed against the hedged foreign debt.
- iii. To the extent the Licensee or the Generating Company is not able to hedge the foreign exchange exposure, the extra rupee liability towards interest payment and loan repayment corresponding to the foreign currency loan in the relevant year shall be permissible provided it is not attributable to the Licensee or the Generating Company or its suppliers or contractors.

WORKING CAPITAL LOANS AND INTEREST ON WORKING CAPITAL

- a. Working Capital Loans shall be shown in Regulatory Accounts in accordance with the appropriate provisions of Tariff Regulations.
- b. Interest on Working Capital shall be shown in the Regulatory Accounts as per the appropriate provisions of Tariff Regulations.

INTEREST ON SECURITY DEPOSIT

Interest on Security Deposit shall be computed and shown in accordance with the appropriate provisions of Tariff Regulations notified by the appropriate Commission. The details of computation shall be shown in Notes to Accounts.

CONTRIBUTION TO CONTINGENCY RESERVE

Contribution to Contingency Reserve shall be shown in Regulatory Accounts in accordance with the appropriate provisions of Tariff Regulations.

INCENTIVE/ (DISINCENTIVES) FOR PERFORMANCE PARAMETERS AND EFFICIENCY GAINS/ (LOSSES)

- a. Incentive and Disincentives for Performance Parameters such as Plant Availability Factor or Plant Load Factor for Generation Companies, Availability for Transmission Licensees, Wires Availability and Supply Availability for Distribution Licensees shall be shown in Regulatory Accounts in accordance with the appropriate provisions of Tariff Regulations.
- Incentive and Disincentives for Efficiency Gains/ (Losses) attributable to factors like O&M Expenses, Distribution Losses, etc. shall also be shown in Regulatory Accounts in accordance with the appropriate provisions of Tariff Regulations.

DEEMED GENERATION

This shall be in accordance with the notified Tariff Regulations of the appropriate Commission.

TRUING UP

Where the appropriate Commission has provided for truing up in its Tariff Regulations, the corresponding year-wise amount accrued up to the date of accounts will be shown in the notes to accounts.

SALES FOR THE YEAR

- a. **Generation:** The Million Units (MU) sold and income there from shall be provided in sales schedule for each generating station.
- b. **Distribution:** Category wise units sold and income there from should be shown separately in the sales schedule for each licensee/licence area. Units sold under banking arrangement and income considered there from should also be shown separately. Income in the form of penalty from consumers for pilferage of electricity and the assessed units of pilferage based on which the penalty has been charged shall be shown separately.
- c. **Transmission: -** The Section/Licence area wise MU wheeled and income there from should be given separately.

NON-TARIFF INCOME

Non-Tariff Income, attributable to the Regulated Business shall be considered for reduction in Annual Revenue Requirement of the Licensee or the Generation Company in the Regulatory Accounts.

OTHER BUSINESS INCOME

Other Income shall be considered for reduction in ARR of the Licensee in the Regulatory Accounts, as per the appropriate provisions of Tariff Regulations.

PRIOR PERIOD ITEMS

Prior Period Income and Prior Period Expenses shall be shown in Regulatory Accounts.

REGULATORY ASSETS

- a. This shall be in conformity with the Tariff Regulations notified by the appropriate Commission.
- b. In the absence of any specific provisions in the Tariff Regulations notified by the appropriate Commission, the following approach shall be adopted:
 - i. The total amount of outstanding Regulatory Asset at the end of the year shall be shown, as a separate entry, under the Assets side of the Accounts.
 - ii. The period of amortisation of the Regulatory Asset and the carrying cost of the Regulatory Asset (if stipulated by the appropriate Commission in the Tariff Order or any other Order in this regard) shall be explained under the Notes to the Accounts.
 - iii. For every year of amortisation, the amount of Regulatory Asset amortised during the year as approved by the Commission and the carrying cost allowed by the Commission on the balance Regulatory Asset shall be shown under the Revenue side, once the Utility is allowed to bill the same to the consumers.

CARRYING COST

Carrying Cost shall be shown in Regulatory Accounts, as approved by the appropriate Commission.

OTHER EXPENSES/EXCEPTIONAL ITEMS/EXTRA ORDINARY ITEMS

Such items of expense shall be_shown in Regulatory Accounts, as approved by the appropriate Commission.

PROFIT SHARING

This shall be in accordance with the applicable Sharing Mechanism specified in the Tariff Regulations of the appropriate Commission and shall be reflected in the notes to the accounts.

TREATMENT OF REVENUE SUBSIDY BY STATE GOVERNMENT AGAINST SALE OF POWER

Any Subsidy given by the State Government to any consumer or class of consumer under Section 65 of the Act shall be considered as revenue to the extent of the billing done to the consumer.

BANKING ARRANGEMENT

Power Banking transactions shall be recorded at the rate as per prevailing directives of the appropriate Commission. Where there are no specific directions from the appropriate Commission, these power banking transactions shall be recorded as per the terms of the agreement.

ITEMS TREATED ON CASH BASIS

Items like delayed payment surcharge, revenue from penalty, theft detected, etc., which are generally accounted for on cash/realization basis, shall be clearly mentioned in notes to accounts by the Utility.

PROVISIONS MADE AGAINST BAD & DOUBTFUL DEBTS

This shall be in accordance with the applicable Tariff Regulations/directives of the appropriate Commission. Actual Bad debts written off as per audited accounts shall be deducted from the amount of provisioning.

INVENTORY

Unless otherwise provided by the appropriate Commission, 100% provisioning shall be made for the non-moving stock lying for more than 3 years and 50% provisioning shall be made for the non-moving stock lying for more than 2 years.

RETAIL AND WHEELING BUSINESS

Bifurcation of the accounts including Schedules between retail and wheeling business shall be shown separately with basis of bifurcation for each item in line with the applicable Tariff Regulations/directives of the appropriate Commission.

6. Advantages and Disadvantages of Allocation Principles and Recommendations

A. Fixed Assets:

1. Plant and Machinery including Generating Station, Transmission Network and Distribution Network:

<u>Allocation Principle (a)</u>: In the proportion of contracted capacity or total connected load or consumption as the case may be.

	Advantages			Di	sadvan	tages	
1.	Basis of apportionment is technical	1.	Con	tracted	capacit	y, connected	load
	and objective in nature.		or c	onsum	ption c	hanges from	year
			to	year	and	therefore,	the
			prop	portion	will ch	ange from ye	ear to
			year	•			

<u>Allocation Principle (b)</u>: In the proportion of revenue generated from respective business activity.

Advantages		Disadvantages
1. Basis of apportionment is	directly 1.	. Revenue generated varies from year
related to the economic o	output of	to year and therefore, the
different business activitie	es or the	proportion will change from year to
benefits derived from the a	assets.	year.
	2.	2. Revenue generated among different
		business segments also varies
		depending upon type of business
		activity, level of tariff, technical and

commercial losses, etc., and does
not necessarily represent the cost of
fixed assets. So, the basis of
proportion of revenues from
respective business activities may
not be representative for
apportionment of fixed assets.

Recommendation: Apportionment on the basis of technical parameters (contracted capacity for Generating Stations and Transmission Networks, and connected load or consumption in Million Units for Distribution Networks) will be most suitable and objective in nature. These parameters for the previous year may be used for apportionment of common assets in ensuing year.

2. Land, Buildings and Civil Structures including Furniture & Fixtures, Office Equipments and Vehicles:

<u>Allocation Principle (a)</u>: In the proportion of floor area occupied for the respective business activity.

		Advantag	es		Disadvantages
1.	Floor an	rea occupie	d by	common	1. This principle ignores the usage level
	assets is 1	measurable.			of the common asset in different
					business activities due to specific
					nature of the business activity.

<u>Allocation Principle (b)</u>: In the proportion of number of employees utilising the Common Asset.

	Advantages		Disadvantages
1.	Number of employees engaged with	1.	Number of employees does not
	the common asset, but belonging to		always reflect the usage of the
	different segments of the business can		common asset by that business
	be easily identified.		activity.

<u>Allocation Principle (c)</u>: In the proportion of revenue generated from respective business activity.

Advantages	Disadvantages
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	Advantages		Disadvantages
1.	Basis of apportionment is directly	1.	Revenue generated varies from year to
	related to the economic output of		year and therefore the proportion will
	different business activities or the		change from year to year.
	benefits derived from the assets.	2.	Revenue generated among different
			business segments also varies
			depending upon the type of business
			activity, which may not be reflective of
			the usage level of that common asset.
			So, the basis of proportion of revenues
			from respective business activities
			may not be representative for
			apportionment of fixed assets.

Recommendation: It is preferable to apportion such common assets on the basis of proportion of number of employees belonging to distinct business segments and utilising the common assets. It will be easy to identify the number of employees engaged with the current assets. The number of employees which do not belong to distinct business segments, but are engaged with the common asset should be excluded, and only the proportion of employees belonging to distinct businesses, engaged with the common assets should be considered for computing the proportion.

3. Other Fixed Assets:

<u>Allocation Principle (a)</u>: In the proportion of revenue generated from respective business activity.

	Advantages		Disadvantages
1.	Basis of apportionment is directly	1.	Revenue generated varies from year
	related to the economic output of		to year and therefore the proportion
	different business activities or the		will change from year to year.
	benefits derived from the assets.	2.	Revenue generated among different
			business segments also varies
			depending upon the type of business
			activity, which may not be reflective
			of the usage level of that common
			asset. So, the basis of proportion of

revenues from respective business
activities may not be representative
for apportionment of other fixed
assets.

<u>Allocation Principle (b)</u>: In the proportion of value of total Fixed Assets directly identified and already separately accounted for.

	Advantages		Disadvantages
1.	Basis of apportionment is simple and	1.	Proportion of fixed assets directly
	objective.		attributable to different businesses
2.	Proportion of fixed assets directly		may not be same as proportion of
	attributable to different businesses can		assets within the common assets being
	be easily determined and applied for		employed for different businesses. The
	apportionment of common assets.		level of usage of the common assets
			may also not be in the proportion of
			the direct assets of the business
			activities.

Recommendation: It is preferable to apportion such common assets based on the proportion of value of fixed assets directly attributable to different business activities of the Utility. Apportionment on the basis of revenue will be more subjective, as revenues from different businesses are dependent upon the type of business activity.

B. <u>Current Assets:</u>

1. Stores and Spares:

• In case it is identifiable with a specific common asset, the same should be apportioned in the proportion in which that common asset is being apportioned.

	Advantages		Disadva	intage	es	
1.	Basis of apportionment is simple and	1.	Disadvantages	of	basis	of
	objective.		apportionment of	comn	non assets	will
			be applicable to	app	ortionmen	t of
			stores and spares	also.		

• In case it is not identifiable with a specific Common Asset, the same should be apportioned:

	Advantages		Disadvantages
1.	Basis of apportionment is directly	1.	Revenue generated varies from year to
	related to the economic output of		year and therefore, the proportion will
	different business activities or the		change from year to year.
	benefits derived from the assets.	2.	Revenue generated among different
			business segments also varies
			depending upon the type of business
			activity, which may not be reflective of
			the usage level of that common
			current asset. So, the basis of
			proportion of revenues from
			respective business activities may not
			be representative for apportionment of
			current assets.

<u>Allocation Principle (a)</u>: In the proportion of revenue generated from respective business activity

<u>Allocation Principle (b)</u>: In the proportion of value of total common fixed assets allocated to respective business activity

	Advantages		Disadv	antage	s	
1.	Basis of apportionment is simple and	1.	Disadvantages	of	basis	of
	objective.		apportionment of	f comm	non assets	will
			applicable to app	portion	ment of st	tores
			and spares also.			

Recommendation: It is preferable to apportion value of stores and spares on the basis of proportion in which that common asset is being apportioned. In case it is not identifiable with a specific common asset, then apportionment may be done in proportion of value of total common assets allocated to different business activities. Apportionment on the basis of revenue will be more subjective, as revenues from different businesses are dependent upon the type of business activity.

2. Other Common Current Assets:

<u>Allocation Principle (a)</u>: In the proportion of value of total Common Fixed Assets allocated to respective business activity

Advantages	Disadvantages
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1.	Basis of apportionment is simple and	1.	Disadvantages	of	basis	of
	objective.		apportionment of	comm	non assets	will
			be applicable to	appo	ortionment	of
			other common cur	rent a	ssets also.	

<u>Allocation Principle (b): In the proportion of revenue generated from respective business</u> activity

	Advantages		Disadvantages
1.	Basis of apportionment is directly	1.	Revenue generated varies from year to
	related to the economic output of		year and therefore, the proportion will
	different business activities or the		change from year to year.
	benefits derived from the assets.	2.	Revenue generated among different
			business segments also varies
			depending upon the type of business
			activity, which may not be reflective of
			the usage level of that common asset.
			So, the basis of proportion of revenues
			from respective business activities
			may not be representative for
			apportionment of Other common
			current assets.

Recommendation: It is preferable to apportion value of such common current assets on the basis of proportion of value of total common assets allocated to different business activities. Apportionment on the basis of revenue will be more subjective, as revenues from different businesses are dependent upon the type of business activity.

3. Receivables

<u>Allocation Principle (a): In the proportion of revenue generated from respective business</u> <u>activity</u>

	Advantages		Disadvantages
1.	Basis of apportionment is directly	1.	Receivables may be specific to the
	related to the economic output of		kind of business activity and may be
	different business activities.		in different proportions of the annual
revenue because of the length of			

collection cycle; for e.g. the collection			
cycle of an EPC contractor is much			
more than that of power generator.			

Allocation Principle (b): In the proportion in which total common assets have been apportioned

Advantages	Disadvantages
1. Basis of apportionment is simple	1. Disadvantages of basis of
and objective.	apportionment of common assets will
	be applicable to apportionment of
	receivables also.

Recommendation: It is preferable to apportion receivables on the basis of revenue though the type of business activity and its collection cycle may have a bearing on the amount of receivables.

4. Investments:

<u>Allocation Principle (a)</u>: Since, Investments are part of Current Assets and generally these are being funded by the cash accruals of the business, it is appropriate that Investments may be allocated in the proportion of revenue generated from respective business activity.

Advantages	Disadvantages
1. Basis of apportionment is directly	1. Investments out of profits may be
related to the economic output of	specific to the kind of business
different business activities.	activity and may be in different
	proportions of the annual revenue
	because of the length of collection
	cycle and probability of collection. So,
	the basis of proportion of revenues
	from respective business activities
	may not be representative for

apportionment of investments.

<u>Allocation Principle (b)</u>: In the proportion of cash accruals generated from respective business activity.

	Advantages		Disadvantages
1.	Basis of apportionment is directly	1.	Cash Accruals of different business
	related to the source of funding of		activities are difficult to compute as it
	Investments as a Current Asset.		will involve application of
			apportionment principle on a number
			of items.
		2.	Cash Accruals generated among
			different business segments also
			varies depending upon the type of
			business activity.

Recommendation: It is preferable to apportion investments on the basis of revenue as apportionment on the basis of cash accruals will be more difficult and subjective as it may involve application of apportionment principles in several heads.

C. Liabilities:

1. Long Term Loans and Equity:

• In case it is identifiable with a particular common asset, the same should be apportioned in the proportion in which that common asset is being apportioned.

	Advantages		Disadvantages
1.	Basis of apportionment is simple and	1.	Disadvantages of basis of
	objective.		apportionment of that particular
			common asset, identifiable with the
			liability in question, will be applicable
			to apportionment of long term
			liabilities also.

• In case it is not identifiable with a particular common asset, the same may be apportioned:

<u>Allocation Principle (a)</u>: In the proportion of value of total common fixed assets allocated to respective business activity.

	Advantages		Disadv	antage	S	
1.	Basis of apportionment is simple and	1.	Disadvantages	of	basis	of
	objective.		apportionment of	f total c	common a	ssets
			(in case the liabil	ity is r	not identif	iable
			with a particular	comm	non asset)	will
			be applicable to	o appo	ortionmen	nt of
			long-term liabiliti	es also	•	

<u>Allocation Principle (b)</u>: In the proportion of revenue generated from respective business activity.

	Advantages		Disadvantages
1.	Basis of apportionment is directly	1.	Revenue generated varies from year to
	related to the economic output of		year and therefore, the proportion will
	different business activities or the		change from year to year.
	benefits derived from such sources of	2.	Revenue generated among different
	funds.		business segments also varies
			depending upon the type of business
			activity, which may not be reflective of
			the usage level of assets pertaining to
			that common liability or equity. So,
			the basis of proportion of revenues
			from respective business activities
			may not be representative for
			apportionment of loans or equity.

Recommendation: In case the common liability is identifiable with a common asset, the same should be apportioned on the basis of which the common asset has been apportioned. In case the common liability is not identifiable with a common asset, it should be apportioned on the basis of which the total common assets have been apportioned.

2. Interest on Long Term Loans - Accrued but Unpaid:

• In case it is identifiable with a particular common long term loan, the same should be apportioned in the proportion in which that common long term loan is being apportioned.

	Advantages		Disadvantages
1.	Basis of apportionment is simple and	1.	Disadvantages of basis of
	objective.		apportionment of that particular
			interest, identifiable with the
			common long term loan in question,
			will be applicable to apportionment
			of interest also.

• In case it is not identifiable with a particular common long term loan, the same may be apportioned:

<u>Allocation Principle (a)</u>: In the proportion of value of total common long term loans allocated to respective business activity.

	Advantages		Disadvantages
1.	Basis of apportionment is simple and	1.	Disadvantages of basis of
	objective.		apportionment of total common long term loan will be applicable to apportionment of interest on long- term loans.

<u>Allocation Principle (b)</u>: In the proportion of revenue generated from respective business activity.

	Advantages		Ι	Disadvantag	es	
1.	Basis of apportionment is directly	1. Rever	ue g	generated va	ries fro	om year
	related to the economic output of	to yea	r an	d therefore,	the pro	portion
	different business activities or the	will c	ang	ge from year	to year	
	benefits derived from the assets.	2. Reve	ue	generated ar	nong d	ifferent
		busir	ess	segments	also	varies

Advantages	Disadvantages		
	depending upon type of business		
	activity, level of tariff, technical and		
	commercial losses, etc., and does		
	not necessarily represent the		
	interest accrued on long term loans.		
	So, the basis of proportion of		
	revenues from respective business		
	activities may not be representative		
	for apportionment of interest		
	accrued.		

Recommendation: In case the interest is identifiable with a common long term loan, the same should be apportioned on the basis of which the common long term loan has been apportioned. In case the interest is not identifiable with a common long term loan, it should be apportioned on the basis of which the total common long term loans have been apportioned.

3. Current Liabilities and Provisions:

<u>Allocation Principle (a)</u>: In the proportion of value of total common current assets allocated to respective business activity.

Advantages	Disadvantages
1. Basis of apportionment is simple and	1. Disadvantages of basis of
objective.	apportionment of common current assets will be applicable to apportionment of current liabilities also.

<u>Allocation Principle (b)</u>: In the proportion of revenue generated from respective business activity

	Advantages		Disadvantages
1.	Basis of apportionment is directly	1.	Revenue generated varies from year to
	related to the economic output of		year and therefore, the proportion will
	different business activities.		change from year to year.
2.	Current Liabilities are a factor of the	2.	Revenue generated among different
	level of operations of the business		business segments also varies

Advantages	Disadvantages
activity, though these may also	depending upon the type of business
depend upon the type of business	activity, which may not be reflective of
activity	the usage level of assets pertaining to
	that common current liability. So, the
	basis of proportion of revenues from
	respective business activities may not
	be representative for apportionment of
	current liabilities and provisions.

<u>Allocation Principle (c)</u>: On the basis of methodology adopted for apportionment of respective expenses to which the current liabilities or provisions relate.

	Advantages		Disadvantages
1.	Basis of apportionment is simple and	1.	Integrated Utilities may incur current
	objective from the point of view of		liabilities for the Company as a whole
	Utilities.		and segregation of expenses to which
			current liabilities relate may become
			difficult for the Utilities.

Recommendation: It is preferable to apportion such common current liabilities in the proportion of revenue generated by the business activity as these have direct relation with the level of operations of the business activity.

4. Revenue Income from Common Assets:

<u>Allocation Principle (a)</u>: In case the revenue is identifiable with a particular common asset, the same should be apportioned in the proportion in which that common asset is being allocated.

	Advantages		Disac	lvanta	iges	
1.	Basis of apportionment is simple and	1.	Disadvantages	of	basi	s of
	objective.		apportionment common asset	will	be applie	cable to
			apportionment	of reve	enues also	Э.

<u>Allocation Principle (b)</u>: In case the Revenue is not identifiable with a particular Common Asset, the same should be apportioned in the proportion in which the total Common Fixed Assets have been allocated to respective business activity.

	Advantages		Disady	vantage	25	
1.	Basis of apportionment is simple and	1.	Disadvantages	of	basis	of
	objective.		apportionment o	f total o	common a	ssets
			(in case revenu	e is n	ot identif	iable
			with a particular	comn	non asset)	will
			be applicable t	o app	ortionmen	t of
			revenues also.			

Allocation Principle (c): In the proportion of direct revenue from different businesses

	Advantages		Disadvantages
1.	Basis of apportionment is directly	1.	Revenue generated varies from year to
	related to the economic output of		year and therefore, the proportion will
	different business activities.		change from year to year.
		2.	Revenue generated among different
			business segments also varies
			depending upon the type of business
			activity. So, the basis of proportion of
			revenues from respective business
			activities may not be representative for
			apportionment of common revenue.

Recommendation: Although realisation of revenue from a business depends on the type of business, it is preferable to apportion common revenue on the basis of direct revenues from different businesses. Apportionment of common fixed assets will be done on the basis of proportion of fixed assets directly attributable to different assets. Therefore, apportionment of common revenue on the basis of common fixed assets will not be representative.

D. Expenses:

1. Generation Expenses and Power Purchase Costs:

<u>Allocation Principle (a)</u>: Fixed Cost or Capacity Charges in the proportion of total allocated capacity and Variable Charges in the proportion of power procurement.

	Advantages		Disadvantages
1.	Basis of apportionment is based on	1.	Computation of Fixed Cost or capacity

Advantages	Disadvantages
actual allocation of cost in line with	charges will require other parameters
prevailing generating tariff regime of	like Total AFC as well as Allocation
Two-Part Tariff based on ABT.	Capacity which changes from time to
	time within a financial year.

<u>Allocation Principle (b)</u>: Entire Cost to be spread in the proportion of respective procurement, i.e., average generation expenses or power purchase costs.

	Advantages		Disadvantages
1.	Basis of apportionment is simple to	1.	Basis of apportionment is not based on
	calculate.		actual allocation of cost in lines with
			prevailing generating tariff regime of
			Two-Part Tariff based on ABT.

Recommendation: It is preferable to apportion fixed charges and variable charges separately. Contracted or allocated capacity will be used for apportioning capacity charges, and power procurement in MU will be used for apportioning variable charges. Apportionment on the basis of average generation expenses or average power purchase costs does not reflect the actual capacity charges payable, which is based on the allocated capacity.

2. Transmission, SLDC and Distribution Expenses:

<u>Allocation Principle (a)</u>: In the proportion of total allocated transmission or distribution capacity, as applicable.

	Advantages			Disadva	ntages	
1.	Basis of apportionment is based on	1.	Actual	recurring	expenses	being
	actual allocation of cost in line with		incurr	ed for differe	nt business a	activity
	prevailing transmission tariff regime.		may n	ot be in the	same propor	tion as
			the	allocated	transmissio	n or
			distrib	ution capacit	y.	

<u>Allocation Principle (b)</u>: In the proportion of in which the total Common Fixed Assets have been apportioned.

Advantages	Disadvantages
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	Advantages		Disady	vantage	S	
1.	Basis of apportionment is simple and	1.	Disadvantages	of	basis	of
	objective.		apportionment o	f comn	non assets	will
			be applicable t	o app	ortionmen	t of
			transmission, SL	DC an	d distribu	ution
			expenses also.			

Allocation Principle (c): In the proportion of number of consumers served

	Advantages		Disadvantages
1.	Basis of apportionment is simple to	1.	This basis of apportionment ignores
	calculate.		the actual capacity utilised by the
			consumers.

Recommendation: Apportionment on the basis of allocated capacity will be most suitable, as there would be less subjectivity involved. These parameters for the previous year may be used for apportionment of common expenses in ensuing year.

3. Employee Expenses:

<u>Allocation Principle (a)</u>: In the proportion of man-days/man-hours devoted to the particular business activity, where proper time sheet records are maintained (especially in case of operational staff).

	Advantages		Disadvantages
1.	Basis of apportionment is simple and	1.	This principle may not be feasible for
	objective and scientific.		support staff, as it is difficult to
2.	Proportion of man-hours devoted to		maintain time sheet records based on
	different business activities can be		each business activity.
	determined easily if time	2.	If time devoted by any employee is
	sheets/records are maintained.		not specific for a particular business
			activity, then expenses on account of
			such employees cannot be
			apportioned on the basis of time sheet
			records.

<u>Allocation Principle (b)</u>: In case of other support staff, in the proportion of a suitable measurable activity being undertaken in the respective business activity, for e.g.;

- Purchase Department : Value of procurement;
- Human Resource Department : Number of directly allocable Employees;
- IT Department : Number of Computer machines, etc.;

	Advantages		Disadvantages
1.	Basis of apportionment is simple and	1.	The proportion of allocation may not
	objective.		be exactly representative of the actual
			effort being put in terms of time and
			manpower.

<u>Allocation Principle (c)</u>: In the proportion of revenue generated from respective business activity

	Advantages		Disadvantages
1.	Basis of apportionment is directly	1.	Revenue generated varies from year to
	related to the economic output of		year and therefore, the proportion will
	different business activities.		change from year to year.
		2.	Revenue generated among different
			business segments also varies
			depending upon the type of business
			activity, which may not be reflective of
			the usage level of that common
			employee resource. So, the basis of
			proportion of revenues from
			respective business activities may not
			be representative for apportionment of
			common employee expenses.

Allocation Principle (d): In proportion of direct employees belonging to different businesses.

	Advantages		Disadvantages
1.	Basis of apportionment is simple.	1.	The common employee costs may be
			more specific to certain business
			activities and apportioning on the
			basis of direct employees belonging to
			different businesses may not be
			representative.

Recommendation: Apportion of employee expenses should be done on the basis of some measurable parameter. For operating staff, the basis of apportionment should be on the basis of man-hours devoted to different business activities, which can be derived from time sheets. If time devoted by any employee is not specific to any particular business, that should not be considered and only the proportion of time devoted by employees to specific businesses should be considered for apportionment of entire common employee expenses for operational staff. For other support activities, expenses should be apportioned based on some measurable parameters, e.g. common employee expenses related to procurement department may be apportioned on the basis of value of procurement for different businesses, common employee expenses related to IT department may be apportioned on the basis of number of computers used for different departments etc. Common expenses related to senior employees, like Chairman, Managing Director etc. may be apportioned on the basis of number of direct employees belonging to different businesses.

4. Repair and Maintenance Expenses:

a. In case the Repair and Maintenance expense is identifiable with a particular common asset, the same should be apportioned in the proportion in which that common asset is being apportioned.

	Advantages		Disac	lvanta	ages		
1.	Basis of apportionment is simple and	1.	Disadvantages	of	f ba	asis	of
	objective.		apportionment	of	that	partic	ular
			common asset	will	be app	olicable	e to
			apportionment	of R&	M expe	enses a	lso.

b. In case the Repair and Maintenance Expense is not identifiable with a particular common asset, the same should be apportioned in the proportion in which the total common fixed assets have been allocated to respective business activity.

	Advantages			Dis	advanta	ages		
1.	Basis of apportionment is simple and	1.	Disadvan	ntage	s of	f ba	asis	of
	objective.		apportion	nmen	t of tota	al comr	non a	ssets
			will be ap	pplica	able to a	apporti	onme	ent of
			Repair a	and	Mainte	enance	expe	enses
			also.					

Recommendation: Apportion of common Repair and Maintenance expenses should be done on the basis of apportionment of total common fixed assets as it is not always possible in most of the cases to identify the common Repair and Maintenance expenses with a specific common fixed asset.

5. Administration and General Expenses:

a. In case the Common Administration and General Expense can be apportioned in a suitable quantifiable proportion (for e.g. Office Rent, Electricity Charges, Security, etc. – on the basis of floor area occupied):

<u>Allocation Principle (a)</u>: then in that particular quantifiable proportion.

	Advantages		Disadvantages
1.	Floor area occupied by common assets	1.	Office rent, electricity charges, etc.,
	is measurable.		may vary from one location to
			another. For example, if any Utility is
			having two facilities at different
			locations, then rent varies depending
			on the location. Apportioning all the
			components of Administration and
			General expenses on the basis of floor
			area or any other quantifiable
			proportion may lead to overstating of
			understating of expenses for a
			particular business.

<u>Allocation Principle (b)</u>: In the proportion of number of direct employees belonging to different businesses.

	Advantages		Disadvantages
1.	Basis of apportionment is simple and	1.	Number of direct employees varies for
	objective.		various segments of business. For
			example, number of direct employees
			for distribution business will be higher
			than number of direct employees for
			transmission business. Apportioning

Advantages	Disadvantages
	all the components of Administration
	and General expenses on the basis of
	number of direct employees may lead
	to overstating or understating of
	expenses for a particular business.

<u>Allocation Principle (c)</u>: In the proportion of revenue generated from respective business activity

	Advantages		Disadvantages
1.	Basis of apportionment is directly	1.	Revenue generated varies from year to
	related to the economic output of		year and therefore, the proportion will
	different business activities.		change from year to year.
		2.	Revenue generated among different
			business segments also varies
			depending upon the type of business
			activity, which may not be reflective of
			the usage level of that common
			Administration and General services.
			So, the basis of proportion of revenues
			from respective business activities
			may not be representative for
			apportionment of common
			Administration and General expenses.

<u>Allocation Principle (d)</u>: After allocating certain percentage (say 40%-50%) of the total Common Administration and General Expenses equally, the remaining portion of Common Administration and General Expenses may be apportioned in the proportion of number of direct employees belonging to different businesses.

	Advantages		Disadvantages
1.	Basis of apportionment recognises the	1.	It will be a two step process, first
	semi variable nature of the common		allocating certain portion equally and
	A&G expenses.		then remaining on the basis of number
			of direct employees and brings
			subjectivity in determination of the

percentage of A&G expenses, which is
to be apportioned equally.

Recommendation: It is preferable to apportion the common Administration and General expenses in proportion of number of direct employees related to different businesses. Apportioning on the basis of floor space or revenues or any other method will be more difficult and subjective than apportioning on the basis of proportion of number of direct employees.

6. Depreciation:

a. In case the Depreciation is identifiable with a particular Common Asset, the same should be apportioned in the proportion in which that Common Asset is being allocated.

	Advantages		Disadva	antage	s	
1.	Basis of apportionment is simple and	1.	Disadvantages	of	basis	of
	objective.		apportionment of	that o	common	asset
			will be applicable	to app	ortionme	ent of
			depreciation also.			

b. In case the Depreciation is not identifiable with a particular Common Asset, the same should be apportioned in the proportion in which the total Common Fixed Assets have been allocated to respective business activity.

	Advantages		Disady	antage	S	
1.	Basis of apportionment is simple and	1.	Disadvantages	of	basis	of
	objective.		apportionment of	f total c	common a	ssets
			will be applicable	e to app	oortionme	nt of
			depreciation also			

Recommendation: Apportion of common depreciation expenses should be done on the basis of apportionment of total common fixed assets to different business activities, as identification of depreciation with a particular common asset is not always feasible.

Replacement of a part of asset – If any part of an asset is replaced at any stage of the useful life of the asset, then the method of charging depreciation for the purpose of regulatory accounts on the asset requires deliberation. Replacement of the old part with a new one may extend the life of the asset. However, depreciation should be charged only for the useful life of the asset and the useful life of the asset should not increase,

although the actual life may increase by replacement of the part. The asset value will increase at the time of replacement of the part to the extent of value of new part and will decrease to the extent of value of old part. Residual depreciation corresponding to the revised asset value should be charged at depreciation rates as per Tariff Regulations for the residual life of the asset. It may be noted here that CERC in its CERC (Terms and Conditions of Tariff) Regulations have specified the depreciation rates to be charged for first 12 years of operation. The balance depreciation is to be spread over the balance useful life of the asset. If the part replacement has been done with in the first 12 years of operation, then the depreciation rates specified in Tariff Regulations on the revised value of the asset should be charged till the first 12 years of operation of original asset is complete and then the balance depreciation on the revised value of assets should be spread over the balance useful life of the asset.

7. Interest and Finance Charges:

a. In case the Interest and Finance Charges are against a particular common liability, then the same should be apportioned in the proportion in which that common liability is being allocated.

	Advantages		Disad	vantag	ges	
1.	Basis of apportionment is simple and	1.	Disadvantages	of	basis	of
	objective.		apportionment common liability		-	
			apportionment of charges also.			

b. In case the Interest and Finance Charges are not identifiable with a particular common liability, the same should be apportioned in the proportion in which the total common liabilities are allocated to the respective business activity.

	Advantages		Disadvantages
1.	Basis of apportionment is simple and	1.	Disadvantages of basis of
	objective.		apportionment of total common
			liabilities will be applicable to
			apportionment of interest and finance
			charges also.

Recommendation: Apportion of common Interest and Finance Charges should be done on the basis of apportionment of total common liabilities to different business activities, as identification of interest and finance charges with a particular common liability is not always feasible.

8. Return on Equity/Capital Employed Identifiable with Common Asset (for the Regulated Businesses):

<u>Allocation Principle (a)</u>: In the proportion of equity/capital employed being allocated to respective business activity based on allocation of common fixed assets.

	Advantages		Disadvantages
1.	Basis of apportionment is simple and	1.	Disadvantages of basis of
	objective.		apportionment of common assets will
			be applicable to apportionment of
			return on equity also.

<u>Allocation Principle (b)</u>: In the proportion of total common fixed assets being allocated to the respective business activity.

	Advantages		Disad	vantage	s	
1.	Basis of apportionment is simple and	1.	Disadvantages	of	basis	of
	objective.		apportionment o	f total c	common a	ssets
			will be applicabl	e to app	oortionme	nt of
			return on equity	also.		

<u>Allocation Principle (c)</u>: In the proportion of revenue generated from respective business activity.

	Advantages		Disadvantages
1.	Basis of apportionment is directly	1.	Revenue generated varies from year to
	related to the economic output of		year and therefore, the proportion will
	different business activities.		change from year to year.
		2.	Revenue generated among different
			business segments varies depending
			upon the nature of business activity.
			So, the basis of proportion of revenues
			from respective business activities
			may not be representative for

apportionment of RoE identifiable for
common assets.

Recommendation: Apportioning of RoE/RoCE identifiable for common assets should be done on the basis of apportionment of common fixed assets to different business activities.

9. Income Tax:

<u>Allocation Principle (a)</u>: In the proportion of revenue generated from respective business activity.

	Advantages		Disadvantages
1.	Basis of apportionment is directly	1.	Income tax not only depends upon the
	related to the economic output of		revenues, but also on depreciation and
	different business activity.		expenses. Depreciation and expenses
			may vary between different
			businesses of the utility. Hence,
			apportioning income tax on the basis
			of revenues only may not be prudent.

<u>Allocation Principle (b)</u>: In the proportion of total profit before tax (PBT) from respective business activity.

	Advantages		Disadvantages
1.	Taxes are directly dependent	1.	PBT for every business of the Utility is
	upon PBT, hence, it is a better		difficult to arrive at as all common assets,
	method of apportionment on		liabilities, costs and revenues need to be
	income tax.		apportioned first.
		2.	PBT of the regulated business of the
			Utility differs from RoE allowable to
			regulated business because of various
			reasons. Hence, apportioning income tax
			on the basis of PBT may not be proper
			from Regulatory Accounts point of view.

<u>Allocation Principle (c)</u>: In the proportion of total Return on Equity being allowed by the Regulatory Authority against respective business activity.

			Advan	tage	S		Disadvantages								
1.	RoE	is	allowed	to	the	regulated	1.	RoE varies from the PBT of the Utility							

Advantages	Disadvantages									
business of the Utility by Regulatory	due to various reasons. Hence,									
Commissions and tax is allowed on	apportioning income tax on the basis									
the income stream of regulated	of RoE may result in under stating or									
business.	over stating income tax for a particular									
	business.									
	2. Also the Utility may be having some									
	un-regulated business for which RoE									
	may not be available.									

Recommendation: Income tax should be apportioned on the basis of proportion of RoE of different regulated businesses of the Utility. However, if there are any un-regulated business of the Utility, then income tax should be apportioned on the basis of PBT of the different businesses.

It may be noted here that if RoE is provided on Pre-Tax basis (as provided by CERC), then there is no requirement of separate apportionment of Income Tax. Here income tax forms a part of Pre-Tax RoE, and it will get apportioned along with RoE on the basis of principles discussed in preceding section for RoE.

7. Segregation of Distribution Business ARR into Wires Business and Supply Business

Wires Business is the business of owning and operating of the distribution system, while Retail Supply Business is the business of procuring the requisite power through longterm, medium-term, and short-term power purchase contracts for supplying to its consumers.

- In case the appropriate Commission has specified the basis of allocation of expenses between Wires Business and Retail Supply Business in the notified Tariff Regulations, the same shall be considered for allocation of the expenses of the Distribution Licensee.
- 2. In case the notified Tariff Regulations do not specify any basis for allocation of expenses between Wires Business and Retail Supply Business, the Distribution Licensees shall follow a consistent basis of allocation ratios for apportionment of

different components of Distribution ARR into Wires Business and Supply Business, after approval of the same by the appropriate Commission. The allocation ratios on which the different components of Distribution ARR may be apportioned are listed below. However, these allocation ratios may be reviewed and customised, depending on the cost structure of the respective Distribution Licensee.

- **a. Power Purchase/Transmission/SLDC Expenses –** All these expenses relate to the Supply Business. Therefore, these should be allocated to Supply Business ARR.
- **b.** Employee Expenses: Direct employees for Wires Business and Supply Business should be identified first and Employee Expenses related to these direct employees should be allocated to respective businesses. Thereafter, all common Employee Expenses relating to employees working for both the businesses can be apportioned between Wires Business and Supply Business using the allocation principles discussed for apportionment of common Employee Expenses. However, till the time the segregation is complete, the Distribution Licensee may apportion the Employee Expenses between Wires Business and Supply Business using an appropriate ratio. Since more employees are employed for Wires Business and the employees who work for Supply Business are lower as compared to Wires Business, the proportion of employee cost allocated to Wires business should be higher than the proportion allocated to Supply business (say, 60:40, or 70:30).
- c. Repair and Maintenance Expenses: Cost of spares, fuel etc. and cost of services related to wires business and supply business need to be separately recorded. Thus all direct R&M Expenses related to Wires Business and Supply Business should be allocated to the respective businesses. Thereafter all common R&M expenses can be apportioned between Wires Business and Supply Business using the allocation principles discussed for apportionment of common R&M Expenses. However, till the time the segregation is complete, the Distribution Licensee may apportion the R&M Expenses between Wires Business and Supply Business in the ratio 90:10.
- d. Administration and General Expenses: All expenses like rents, electricity charges, water charges, internet charges, office upkeep, insurance charges etc. relating to offices for distribution business should be allocated to Supply Business, while that relating to distribution sub-stations/receiving stations should be allocated To Wires Business. Rates and taxes, Freight, and other purchase related expenses need to be

allocated based on the goods purchased – whether for Wires Business or for Supply Business. All other A&G expenses, which are common to both Wires Business and Supply Business can be apportioned using the allocation principles discussed for apportionment of common A&G Expenses. However, till the time the segregation is complete, the Distribution Licensee may apportion the A&G Expenses using the ratio 50:50.

- e. Depreciation: Major portion of assets of Distribution Licensee would be relating to Wire Business, as sub-stations, HT and LT lines are for wheeling of electricity. Only the service connections and consumer meters, which are in the books of Distribution Licensee should be allocated to Supply Business. Thus if asset class wise break up of assets relating to Wires Business and Supply Business are available, then depreciation relating to direct assets of Wires Business and direct assets of Supply Business should be allocated to respective businesses. Depreciation on any common asset, if any can be apportioned between Wires Business and Supply Business using the allocation principles discussed for apportionment of common depreciation. However, if only the overall asset break-up between Wires business and Supply business is available, then the depreciation has to be apportioned in the same ratio. Till the time the segregation is complete, the Distribution Licensee may apportion depreciation for distribution business in the ratio 90:10.
- f. Interest on Loans: All new loans availed by the Licensee should be separate for Wires Business and Supply Business, based on the funding of the assets for Wires Business and Supply Business. In this way, interest on loans for Wires Business and Supply Business will be clearly identifiable and these should be allocated to respective businesses. Other interest charges, which are common to both Wires Business and Supply Business should be apportioned using the allocation principles discussed for apportionment of common Interest and Finance Expenses. However, till the time the segregation is complete, the Distribution Licensee may apportion interest on loans between Wires Business and Supply Business in the ratio 90:10.
- **g. Interest on Working Capital:** All new Working Capital loans availed by the Distribution Licensee should be separate for Wires Business and Supply Business. In this way, interest on Working Capital loans for Wires Business and Supply Business will be clearly identifiable and these should be allocated to respective businesses. Other interest on Working Capital which are common to both Wires Business and

Supply Business can be apportioned using the ratio 10:90, as major portion of Working Capital loans belongs to supply business.

- h. **Interest on Security Deposit:** Security deposits are collected by Distribution Licensees from the consumers for supplying electricity to them, hence, the interest on Security Deposits should be allocated entirely to the Supply Business.
- i. Provision for Bad Debts: Major part of bad debts relates to supply business. However, as it is not exactly possible to separate the bad debts between Wires Business and Supply Business, these expenses, if any can be apportioned between Wires Business and Supply Business using the ratio 10:90.
- **j. Return on Equity:** RoE for both the businesses should be allowed based on the Equity invested separately for both the functions. Common RoE, if any should be apportioned between Wires Business and Supply Business using the allocation principles discussed for apportionment of common RoE. In case equity invested for both the functions cannot be segregated clearly or till the time the segregation is complete, RoE can be apportioned between Wires Business and Supply Business and Supply Business using the proportion of GFA between Wires Business and Supply Business or using a suitable ratio, say 90:10.
- **k. Income Tax:** Tax is a function of profit earned, i.e. return of a business, therefore, it should be apportioned on the basis of RoE related to Wires Business and Supply Business, as discussed for apportionment of Income Tax.
- 1. Non Tariff Income: Non Tariff Income resulting from meter rent, delayed payment charges, service connection charges etc. should be allocated to Supply Business, while income resulting from sale of scrap etc. should be allocated to Wires Business. Other common items of Non-tariff Income, if any can be apportioned using the allocation principles discussed for apportionment of revenues. However, till the time the segregation is complete, the Distribution Licensee may apportion the Non-Tariff Income between Wires Business and Supply Business using the ratio 10:90.

8. Structure for Chart of Accounts

We had initially proposed a 10-digit Structure of Account Codes for the Chart of Accounts, in accordance with the Scope of Work. However, based on discussions with the FOR Working Group on this subject, it has been concluded that there is no benefit in prescribing a separate set of Account Codes for the Chart of Accounts, on account of the following reasons:

- 1. The Regulatory Accounts shall be drawn from the final Accounts/final Trial Balance and the entities would already be having their own account codes for recording all the heads of expenses and revenue. Hence, there is no need to create another set of account codes under which each head of expense and revenue are accounted for.
- 2. If another set of Account Codes are required to be maintained by the entities, it will lead to significant duplication of effort, as all heads of expense and revenue will have to be maintained under two different sets of accounting codes, and this may also lead to confusion while booking the head of expense/revenue.

9. Applicability of Regulatory Accounts to Electricity Departments, whose Audited Accounts are being maintained on Single Entry System

Distribution of electricity in States like Goa and in some Union Territories is being carried out by the Electricity Departments of the respective State Governments, where the accounts are being maintained on cash basis under a single-entry system. Preparation of Regulatory Accounts for submission to the Regulatory Commissions may be difficult for such entities, as the Audited Accounts of Electricity Departments, which act as the base for preparation of Regulatory Accounts, are maintained on a single-entry system. Under this system, only partial and incomplete record of transactions is maintained, because both sides of the transaction are not recorded, on account of which, a Trial Balance cannot be drawn up to test the arithmetical accuracy of the records. Consequently, Profit and Loss account and Balance Sheet are not prepared in the absence of Trial Balance, and Statements are drawn up only for Sources of Funds and Utilisation of Funds, and there is no one-to-one correspondence between the sources and use of the funds, which would normally have been maintained under a double-entry accounting system. Further, there is no break-up available between Generation, Transmission and Distribution functions being undertaken by the Electricity Department. The Joint Electricity Regulatory Commission (JERC) for Goa and Union Territories has, in the Tariff Orders for the Electricity Departments for FY 2011-12 and FY 2012-13, issued directives to the Electricity Departments to maintain their Accounts separately for electricity distribution on commercial principles and to get the accounts audited. The JERC for Goa and Union Territories has directed the Electricity Departments to prepare the Asset and Depreciation register function-wise and asset class-wise. However, the Electricity Departments have not completed the tasks yet. Similarly, JERC for Manipur and Mizoram, in its Tariff Orders for FY 2010-11 for Power and Electricity Department, Mizoram and for Electricity Department, Manipur, respectively, has issued directives to prepare the Books of Accounts and the Asset Register for the Electricity Departments.

Once the Books of Accounts are prepared by the Electricity Departments in accordance with the double entry system of accounting as directed by the Commission, it will be possible for them to prepare Regulatory Accounts and submit the same to the Commission. Hence, there should not be any exemption applicable to Electricity Departments for preparation and submission of Regulatory Accounts as per the Reporting System, however, the applicability of the same may have to be deferred till the appropriate time.

ANNEXURE- A

FORM OF AUDIT REPORT ON THE REPORTING SYSTEM ON POWER REGULATORY ACCOUNTING -2012

I/We, ______having been appointed as the Auditor(s) under the requirements laid down in the Reporting System on Power Regulatory Accounting, 2012 (here in after referred to as the Reporting System) issued by _______ (herein after referred to as the ______ Electricity Regulatory Commission) by _______ (mention name of the Entity) having its registered office at _______ (mention registered office address of the entity), have audited the attached Regulatory Accounts covering _______ (mention name of the service/geographical area) for the year ended _______ (mentioned the accounting Year) of the Entity.

- The Entity is responsible for preparation of the Regulatory Accounting Reports. My/ Our responsibility is to audit the Regulatory Accounting Reports in accordance with the Reporting System and generally accepted Auditing standards in India.
- 2. Further to my/our comments/observations given in the enclosed Annexure (Annexure is required in case there are comments/observations on Regulatory Accounting Reports), I/We report that:
 - a) I / we have received all the information and explanations, which to the best of my/our knowledge and belief were necessary for the purpose of my/our audit.
 - b) In my / our opinion proper books of account have been kept by the Entity so far as appears from my / our examination of those books to enable the preparation of complete and proper Regulatory Accounting Reports in accordance with the Reporting System.
 - c) The Regulatory Accounting Reports for the year ended _____are in agreement with the books of accounts and have been properly drawn up in accordance with the Reporting System and the methods and basis laid down in the Manual of the Entity prescribed under the Reporting System.
 - d) In my/our opinion, and to the best of my/our information and according to the explanations given to me/us, the Regulatory Accounting Reports for the year ended _______ provide the information as per the requirement of the Reporting System and represent a true and fair view in conformity with the framework as per the Reporting System.

 I/ We also report that all changes to the Manual prescribed under the Reporting System that materially affect the Regulatory Accounting Reports for the year ended ______have been filed with the respective Commission by the Entity.

Dated: Place: Signature Name of Proprietor/Partner Membership No. Name of the Firm with Stamp (Seal)

The Reporting System on Power Regulatory Accounting-2012 Gross Fixed Assets Breakup

Asset wise break-up of Gross Fixed Assets (Optional)

SI. No.	Asset Particulars (to be provided asset-wise)	Asset code	Opening Asset value	Cumulative Depreciation in the Opening Asset value	Additions during the year									Deletions during the year			alue		Undischarged liabilities				
					Base cost	IDC	IEDC	FERV	Pre- commissio ning expenses	Survey expenses	Capital spares	Total Addition S	Depreciation	Asset Value	Depreciation	Correspon ding Equity to be deducted	>	Cumulative Depreciatio	Opening	Additions	Discharged duing the year	Reversal/A djusted duing the year	Closing
1												-					-	-					-
2												-					-	-					-
3												-					-	-					-
4												-					-	-					-
5												-					-	-					-
6												-					-	-					-
7												-					-	-					-
8												-					-	-					-
9												-					-	-					-
			-	-	-	-	-	-	-	-	-	-	-	-	-		-	-	-	#	-	-	-
n																							1