ODISHA ELECTRICITY REGULATORY COMMISSION

BIDYUT NIYAMAK BHAWAN
UNIT-VIII, BHUBANESWAR - 751 012
****

Present: Shri S. P. Nanda, Chairperson
Shri B.K. Misra, Member
Shri S. P. Swain, Member

Case No.1 of 2013

In the matter of: **Setting out the principles of the Multi Year Tariff (MYT) for the 3rd control period from 01.04.2013 to 31.03.2018.**

AND

In the matter of: Director (Tariff), OERC,
Bidyut Niyamak Bhavan, Unit-VIII, Bhubaneswar
… Petitioner

Vrs.

1. Western Electricity Supply Company of Orissa Ltd. (WESCO)
2. North Eastern Electricity Supply Company of Orissa Ltd. (NESCO)
3. Southern Electricity Supply Company of Orissa Ltd. (SOUTHCO)
4. Central Electricity Supply Utility (CESU)
5. GRIDCO
6. Govt. of Odisha
7. Shri Sunil Bihari Das **… Respondents**

For the petitioner: Priyabrata Pattnaik, Director (Tariff) I/c, OERC

For the respondents: Shri Nilambar Jena, CCO, CESU,
Shri M.Swain, GM (Finance),CESU,
Shri G.B. Swain, GM (F), REL, CSO, Bhubaneswar,
Shri Jogendra Behera, Consultant,WESCO,NESCO & SOUTHCO,
Shri Manas Kumar Das,GM(CSO),WESCO,NESCO & SOUTHCO,
Shri Sabyashachi Padhi, DGM, SOUTHCO,
Shri S.K.Routray,DMF(Com.& RA),SOUTHCO,
Shri P.K. Pradhan, Director (Com.), GRIDCO,
Shri B.P. Mohapatra, Director (F), GRIDCO,
Shri B.D.Ojha,DGM(Economics), GRIDCO,
Shri S.K.Parida,Sr.GM(PP),GRIDCO,
Shri U.N.Mishra,GM(PP),GRIDCO and
Shri Thakuna Das, Desk Officer, Department of Energy, Govt. of Odisha.

Date of Hearing: 01.03.2013 **Date of Order: 20.03.2013**

O R D E R

1. The Commission prepared a consultative paper setting out the principles of Multi-Year Tariff (MYT) for the third control period from 01.04.2013 to 31.03.2018. The Commission had earlier enunciated Multi-Year Tariff (MYT) principles for the 1st control period in its order dated 18.06.2003 passed in Case No.8/2003 on the Long Term Tariff Strategy (LTTS) defining principles for the first control period from 01.04.2003 to 31.03.2008. The Commission had also set out the principles of Multi-Year Tariff (MYT) for the 2nd control period from 01.4.2008 to 31.3.2013 vide its Order dated 28.02.2011 passed in Case No.133 of 2009.

2. The principles laid down in the 2nd control period would be over by 31.3.2013 and therefore, there is a need to set out MYT principles for 3rd control period from 01.4.2013 to 31.3.2018. In order to set out such principles the Commission prepared a Consultative Paper on MYT principles for the period from FY 2013-14 to FY 2017-18 which was placed in its website www.orierc.org and also published in English and Odiya newspapers for obtaining views of the stakeholders and public in general. This Consultative paper was registered as Case No.1 of 2013 wherein the Director (Tariff) I/c , OERC as the designated petitioner.

3. Control period: The control period for the present MYT shall begin from 1st April, 2013 and shall end on 31st March, 2018. The principles as set out in this order would be applicable for the ARR from FY 2013-14 to FY 2017-18 and the licensees would file their ARR applications for these years basing on these principles. In the meantime DISCOMs have filed their ARR for FY 2013-14 and the Commission while finalizing the ARR for FY 2013-14 has taken into consideration the principles as laid down in this order.

4. Base Year: The Commission shall determine the values for the base year based on the available audited accounts for the relevant years and other factors as considered appropriate by the Commission. The values of the various components of the ARR would further be based on the nature of item whether controllable or uncontrollable in nature. Presently, audited accounts for FY 2011-12 is available with the Commission for all the four DISCOMs.

5. **Background of Multi Year Tariff framework**

   Electricity Act 2003, National Tariff Policy and OERC Regulations provide for framing of MYT framework. These provisions are discussed below:

6. **Statutory Provisions**

   a) Electricity Act, 2003

   Section 61- The Appropriate Commission shall, subject to the provisions of this Act, specify the terms and conditions for the determination of tariff, and in doing so, shall be guided by the following, namely:-
   x x x x x x x x

   (f) Multi Year Tariff principles;

   (i) the National Electricity Policy and tariff policy:

b) National Electricity Policy

5.4.4 Conducive business environment in terms of adequate returns and suitable transitional model with predetermined improvements in efficiency parameters in distribution business would be necessary for facilitating funding and attracting investments in distribution. ***Multi-Year Tariff (MYT) framework*** *is an important structural incentive to minimize risks for utilities and consumers, promote efficiency and rapid reduction of system losses. It would serve public interest through economic efficiency and improved service quality. It would also bring greater predictability to consumer tariffs by restricting tariff adjustments to known indicators such as power purchase prices and inflation indices. Private sector participation in distribution needs to be encouraged for achieving the requisite reduction in transmission and distribution losses and improving the quality of service to the consumers.*

c) National Tariff Policy

Para 5.3

(h) ***Multi-Year Tariff***

1) Section 61 of the Act states that the Appropriate Commission, for determining the terms and conditions for the determination of tariff, shall be guided inter-alia, by multi-year tariff principles. The MYT framework is to be adopted for any tariffs to be determined from April 1, 2006. The framework should feature a five-year control period. The initial control period may however be of 3 year duration for transmission and distribution if deemed necessary by the Regulatory Commission on account of data uncertainties and other practical considerations. In cases of lack of reliable data, the Appropriate Commission may state assumptions in MYT for first control period and a fresh control period may be started as and when more reliable data becomes available.

2) In cases where operations have been much below the norms for many previous years the initial starting point in determining the revenue requirement and the improvement trajectories should be recognized at "relaxed" levels and not the "desired" levels. Suitable benchmarking studies may be conducted to establish the "desired" performance standards. Separate studies may be required for each utility to assess the capital expenditure necessary to meet the minimum service standards.

3) Once the revenue requirements are established at the beginning of the control period, the Regulatory Commission should focus on regulation of outputs and not the input cost elements. At the end of the control period, a comprehensive review of performance may be undertaken.

4) Uncontrollable costs should be recovered speedily to ensure that future consumers are not burdened with past costs. Uncontrollable costs would include (but not limited to) fuel costs, costs on account of inflation, taxes and cess, variations in power purchase unit costs including on account of hydro-thermal mix in case of adverse natural events.

5) Clear guidelines and regulations on information disclosure may be developed by the Regulatory Commissions. Section 62 (2) of the Act empowers the Appropriate Commission to require licensees to furnish separate details, as may be specified in respect of generation, transmission and distribution for determination of tariff.

d) OERC (Terms and Conditions for determination of tariff) Regulations, 2004.

Regulation 5(f)

The Commission may require a long term business plan from each Licensee for adopting ***the multi year tariff regime****, which the licensee shall scrupulously comply.*

e) OERC (Conduct of Business) Regulations, 2004

Regulation 54. Multi year tariff principles and guidelines.

1) *The Commission may adopt MYT principles for matters relating to calculation of revenue requirement of the transmission or the distribution licensees and the tariff determination including on aspects of investments, reduction of loss levels, other efficiency gains to be achieved, the revision in charges, charges in tariff structure, pass through of identified element of costs and such other matter as the Commission may by a general or special order direct.*

2) *The Commission may, as and when considered appropriate, issue guidelines for filing statement of revenue calculations and tariff proposals for periods of more than one financial year and unless waived by the Commission, the licensee shall follow such guidelines issued by the Commission.*

7. The objections/comments/suggestions invited from the stakeholder to put forth their views and opinions on the consultative paper have been summarized and are discussed below issue-wise :

7.1 Quality of Supply & Consumer Services

Views of Shri Sunil Bihari Das

Shri Das submitted that for better consumer services different mode of bill payment facilities shall be adopted such as online payment through Internet, ATM, Credit Card, Mobile, Cheque, collection through franchisee at door step, spot billing and at DISCOM office counter.

As regards, billing error Shri Das submitted that consumers shall be able to lodge complaint under different mode such as online complain registration, unique dedicated mobile/ phone number with recording facility, complaint desk with personal computer at each section/division level and print out facility as a proof of acknowledgement of registry such billing error/ faulty meter complain.

Shri Das submitted that voltage is a major concern for LT level single phase domestic consumer throughout the network in Odisha. The major uncontrollable cause for DISCOM is the exponential addition of single phase induction motor load (HVAC) to the existing weak LT network. The single LT circuit is also to long which is the distance between DTR output and load end. The other reason for low voltage is the unregulated growth of housing-cum-commercial buildings.

Shri Das suggested that VAR compensation (Reactive Power Balance) is the major issues to maintain the voltage level within the permissible range. A complete LT system network stability study (33 KV/ 11KV/ 0.4 KV) may be undertaken with assumptions such as consumers having induction motor load and time of the use of such motors. Demand Side Management shall also be adopted.

Regarding metering Shri Das suggested that the activity of meter installation, after sales service and upgradation of meter shall be outsourced to OEM and the meter testing shall be done jointly by OEM and DISCOMs.

As regards, the failure of DTRs important information such as rating, location, month, date, time of failure, billing and collection efficiency, total no. of consumers linked to the DTR and history and frequency of failure shall be recorded and for that purpose CMMS system shall be implemented.

Views of WESCO, NESCO & SOUTHCO

Three DISCOMs submitted that they have taken certain steps to reduce Billing Error by Minimizing Human Intervention. AMR has been implemented for almost all consumers above 20 kW and human errors in such billing are almost non-existent. Smart metering initiatives is proposed for the LT consumers, standardized spot billing software compatible to the oracle based billing database implemented across the companies with inbuilt input validation rules and Penalty provisions incorporated in the service level agreements (SLA) with spot billing agents for billing error. In the SLA supervisory mechanism is inbuilt to preempt human error.

As regards, Quality of supply with Monthly Billing existing regulations on licensee's standard of performance regulations (guaranteed and overall standard of performance) provides for ensuring QoS norms. Besides, Hierarchical electrical supply system with interdependencies on transmission and generation parameters makes it difficult to pinpoint quality of supply failure, therefore, there is a need for an integrated quality management mechanism across the entire value chain.

DISCOMs further submitted that the existing scenario of massive rural electrification drives, implemented by different agencies along with existing age old fragile distribution network, linking of quality supply indices at LT level with monthly billing may not be feasible at this transitional phase. As such the load factor incentives is computed on the basis of actual hours of supply and thus supply related issues already stand accounted for in industrial billing.

7.2 Sale and Power Purchase:

Views of WESCO, NESCO & SOUTHCO

The three DISCOMs submitted that sale of power may be considered as uncontrolled parameter as the same is dependent on economic cycles. The FOR model MYT Regulation and MYT Regulations of other States have also considered sale as uncontrollable parameter. Commission in Case No.68, 69, 70 & 71 of 2007 regarding truing up exercise has also considered sales quantity and sales mix as uncontrollable parameter in line with National Tariff Policy. The Commissions 'Top Down Approach' of sales determination leads to notional/ fictitious revenue. This leads to gap in existing revenue and future cost projection which is mis-calculated leading to unrealistic tariff rate and perpetual under recoveries. States such as CSERC, MPERC, DERC, MERC, APERC, GERC etc. have adopted 'Bottom Up Approach' to determine the ARR tariff for DISCOMs and have considered sales as uncontrollable parameter. ATE in Appeal No.100 of 2007 and Appeal No.94 of 2008 have also ordered in support of bottom up approach.

Views of CESU

CESU submitted that sale and purchase may be allowed as per the Business Plan of DISCOMs to be considered during the control period subject to its variation more than 10% due to implementation of any Flagship programmes by Central or State Govt. The extra cost shall be allowed to DISCOMs in subsequent year of the control period through truing up exercise as per audited accounts.

Views of GRIDCO

GRIDCO submitted that in the Business Plan order dated 20.3.2010 in case No.41, 42 & 43 of 2007 and 22 of 2008 approved the DISCOM wise power purchase and sale relevant to the 2nd control period (FY 2008-09 to FY 2012-13) on an aggregated basis instead of on the basis of consumer categories i.e. LT, HT & EHT segment wise. The said order also had not mentioned of any separate approval of sale and purchase of power in respect of metered or non-metered consumers.

GRIDCO further submitted that the model Regulation for Multi-Year Distribution Tariff prepared by FOR provides for forecast of sales and purchase quantum and cost separately for metered as well as un-metered consumers. GRIDCO therefore requested that DISCOM may be directed to complete 100% metering of electricity consumers in a time bound manner so that the forecast of sale and purchase of power by DISCOMs will reasonably be accurate to their projections.

The Commission may also consider approving segment wise (LT, HT & EHT) sale and power purchase in the relevant Business Plan which will be in consonance with the MYT principle for the 3rd control period. GRIDCO is committed to make all necessary arrangements for procurement of energy requirement of DISCOMs and DISCOMs should make all out efforts to see that their project power purchase and sale must be within the approved limit.

7.3 Operation and Maintenance Cost

(A) Employee Cost

Views of WESCO, NESCO & SOUTHCO

Forum of Regulator (FoR) in model MYT Regulation have provided employee cost as a product of CPI and is calculated as EMPn = (EMPb*CPI inflation) + provisions

The last three year average CPI is 10.58% therefore an escalation of 10% may be allowed on the base employee expenses. Also the 7th Pay Commission is due in FY 2015-16 which will increase the employee expenses by around 30% which may be considered. There is need to rationalize compensation structure along with incentive and disincentive schemes to retain employees and improve productivity level. DISCOMs therefore submitted to adopt FOR Guidelines and Index Employee cost with the CPI inflation Index along with the provision for implementation of 7th pay commission and any other factors beyond the control of DISCOMS.

Views of CESU

CESU submitted that due to RGGVY programme all the villages under CESU will be electrified and the consumer base would increase exponentially. CESU at present manages 60 lakh consumers by approximately 8200 employees. With the growth of consumers mostly in rural areas CESU is to gear up with adequate infrastructure in terms of employees, offices, communication system, etc. Though franchisees system is in place to manage these operations but it would take 3-5 years to strengthen the system and in the meantime CESU is to manage this vast network. Therefore, the employee cost must be fixed as a function of a number of consumers.

View of Shri Sunil Bihari Das

The Commission shall conduct through HR consultant employee satisfaction + engagement study as the age of most of the distribution professionals is above 45 years. There should be a carrier plan path to attract the young talent to the industry. The pay scale revision of DISCOMs should be de-linked from Govt. of Odisha Pay Commission guidelines during the 3rd control period. The salary expenditure should have a cap with escalation as per inflation published by RBI from time to time.

The existing practice of calculation of employees cost for the current control period shall continue. However, if there is any actual saving in employee cost due to outsource activities during the operational period the excess amount on such saving shall be kept as reserve money. DISCOMs should not divert or spend that amount on other head. The DISCOMs should prepare an organization chart forecasting total number of employees with 3-4 level reporting structure taking into consideration the business need to run its operation in next ten year ahead. Outsourcing and automation IT/IT implementation will be a major help to DISCOMs to reduce man power cost.

(B) Repair & Maintenance Cost

Views of WESCO, NESCO & SOUTHCO

Representative of the three DISCOMs submitted that they were unable to spend adequate amount on R&M activities due to severe cash constraints. DISCOMs would like to focus on R&M activities and proposes to spend 5.4% of GFA on R&M activities. As the DISCOMs have to maintain the RGGVY assets therefore R&M expense of 5.4% of the RGGVY asset may be allowed.

Views of CESU

CESU submitted that in addition to the R&M of 5.4% on opening GFA for each year, Commission may allow additional R&M for the purpose of maintenance of assets under RGGVY and BGJY schemes. Commission may also consider allowing approved unspent R&M of the previous years to be carried forward in the subsequent years.

(C) A&G Expenses

Views of WESCO, NESCO & SOUTHCO

The 3 DISCOMs submitted that Forum of Regulators model regulation provides A&G as a product of WPI inflation which is represented as A&Gn = (A&Gb*WPI Inflation) + Provision. The average WPI for the last 3 years is 7.12%, therefore, an escalation of 7% may be allowed on the base employee expenses. They further submitted to allow additional A&G expenses to meet the increased expenses for various initiatives towards loss reduction measures and to meet future load growth.

Views of CESU

CESU submitted that Commission may consider certain A&G expenses, as cost has increased due to growth which may be considered as per actual expenditure during the last six months. Additional A&G cost for new activities shall be allowed as per six months actual expenditure. Commission may also consider to allow carry forward of the balance unavailed amount for previous years and grant more escrow relaxation to meet the required amount.

View of Shri Sunil Bihari Das

The different budget head within the A&G expenses shall have a cap and needs to be continuously monitored by the regulators. The expenses in each head shall not be allowed to go beyond the approved /cap amount. Out of the two parts of approved expenditure under A&G, the second part of A&G expenses shall be allowed towards employees skill upgradation training, technical seminar /workshop, legal cost, customer awareness programme, franchisee, contract employee and customer / technical awareness training etc.

7.4 Bad Debts

Views of WESCO, NESCO & SOUTHCO

The three DISOMs submitted that due to increased rural electrification they are finding it challenging to maintain collection efficiency of 99% at LT level. He further submitted to consider the bad debts based on realistic collection efficiency at LT level to enable them to recover its entire costs after duly considering the performance levels during the control period.

Views of CESU

CESU submitted out of the total billing the actual collection for each category EHT, HT and LT shall be separated and the balance shall be considered as bad and doubtful debts. Due to increase in LT consumer mix the provision for bad and doubtful may be considered as 2% on gross billing amount.

7.5 Depreciation

Views of WESCO, NESCO & SOUTHCO

The three DISCOMs submitted that they have to maintain and replace the assets (need basis) created under RGGVY assets and therefore, depreciation on the assets created under RGGVY may be allowed.

Views of CESU

CESU submitted that depreciation shall be allowed as per post-94 rates and since the DISCOMs prepare their accounts as per Companies Act the depreciation shall be allowed as per the rate suggested by the auditors in accordance to the Companies Act, 1956.

7.6 Financing of Short Term Liabilities

Views of WESCO, NESCO & SOUTHCO

The three DISCOMs submitted that FOR model MYT Regulations provide for Interest on Working Capital on normative basis in the following manner.

a) O&M expenses for one month
b) Two months equivalent of expected revenue
c) Maintenance spares @ 40% of R&M expenses for one month:

Less: Security deposits from consumers, if any.

Provided that the interest on working capital shall be on normative basis and rate of interest shall be equal to the State Bank Advance Rate (SBAR) as of the date on which petition for determination of tariff is accepted by the Commission.

The further submitted that most of the states such Chhattisgarh, M.P, Maharashtra, AP are allowing Interest on Working Capital on a normative basis.

DISCOMs therefore requested the Commission to allow the interest due to Working Capital calculated as per FOR guidelines

Views of CESU

CESU submitted that due to insufficient fund to manage its working capital, three months working capital may be treated as loan and interest as per the prevailing bank rate which shall be allowed towards interest on working capital under the finance cost.

View of Shri Sunil Bihari Das

Shri Das submitted that DISCOM shall keep three months fixed expenses amount as working capital in cash or LC through a Bank. This amount shall take into account one peak month power purchase cost in a year, the salary cost of all type employee including contract employee, franchisee employee, mandatory day to day O & M cost. DISCOMs shall be allowed to withdraw working capital from this reserve account only in emergency situations due to bad cash outflow in any month with the prior approval of Regulator providing reasons for such withdrawal.

7.7 Financing of Long-Term Liabilities

Views of CESU

CESU submitted that these costs shall be allowed as per the loan agreement and changes by the funding agency from time to time. Commission may also consider to allow carry forward the balance unavailed amount for previous years.

View of Shri Sunil Bihari Das

The Govt. of Odisha shall 'arrange' the 'Debt' for the DISCOM for 3rd control period and 'interest cost' burden shall be minimum to DISCOM. The DISCOM shall not spend time/effort on 'arranging money' from market instead spend time/put-all effort on 'generating money' from the business.

This DISCOM management shall concentrate/focus and put all its effort by bringing in modern management practice in meeting/achieving the 'target' performance parameter for 3rd control period as fixed by the Regulator.

DISCOM shall not take plea of 'constraint in arranging' finance/cost of finance etc and timely availability of money as the 'biggest' hurdle to turn-around DISCOM business.

7.8 Capital Expenditure

Views of WESCO, NESCO & SOUTHCO

The three DISCOMs submitted that arranging the counterpart funding for Rs.1200 crores as their share in the CAPEX programme of Govt. of Odisha is a challenge before the DISCOMs. The major constraints in arranging counterpart funding are that in terms of priority of escrow relaxation the lenders comes 4th (behind current BST dues, employee and R&M expenses) assets are yet to be released from GRIDCO, poor Balance Sheet with huge accumulated losses and negative net-worth. The REC in its letter dated 3 January, 2013 have put certain conditions before providing the counterpart funding. These conditions include providing of State Govt. Guarantee/Bank Guarantee or Hypothecation of 100% charge free assets and future assets to be created out of the loan and default escrow mechanism on first charge paripasu basis to the tune of maximum monthly installment of the Principal and Interest amount. In order to avail the counterpart loan of Rs. 122 crores for the first phase of Capex, the monthly maximum Escrow requirement is about Rs.1 Crore/Month/DISCOM.

DISCOMS therefore submitted that in order to avail counterpart funding certain measures can be taken such as govt. of Odisha may sanction soft loan at 4% with escrow mechanism for its recovery, release of Asset and change in prioritization of Escrow Account, DISCOMs may be allowed to retain the ED amount collected by it for the next three years with suitable moratorium of repayment. Reasonable rate of interest may be paid to the Govt. by DISCOMs and collection of consumer development fund @ 25 paisa per unit to be used as a counterpart funding for system improvement and CAPEX works. The benefits of loss reduction due to such CAPEX works will be passed onto the consumers in 3-5 years.

Views of CESU

CESU submitted that their capital expenditure programme is as per the CAPEX programme and other programme plan for time to time by Govt. of Odisha.

Views of GRIDCO

GRIDCO submitted that the adjustment for variation in actual investment of capital expenditure and the forecast and the impact thereof may not be deferred till end of the control period and the same may be given in the ARR for pass through in the tariff considering the actual completion of the particular work/project. This arrangement will enable the licensee to avail the benefits of depreciation, interest on loan and R&M expenses on actual capitalization.

GRIDCO further submitted that the Commission may consider to allow capitalization of interest during construction (IDC) all the approved capital investment plan instead of allowing such interest on annual basis in the ARR as the interest amount during the construction period is to be capitalized.

The Commission may in contrary to the allowance of interest on the approved capital expenses in the ARR may allow only on loan availed by the appropriate licensee. The present arrangement of adjustment in ARR on account of variation in forecast and actual value of interest on loans raised for financing capital expenditure in truing up may be continue.

Views of Shri Sunil Bihari Das

During the 3rd control period OERC should arrange money in order to create new distribution asset through own direct control. Under the new asset-CAPEX proposal the project management, supervision of construction (engineering, testing, commissioning, and work completion certificate for payment and performance guarantee etc.,) shall be DISCOMs responsibility. The repair & Maintenance of existing old assets shall be direct responsibility of owner of DISCOMs and arrangement of financing of R & R programme should be through equity or debt route of the owner.

7.9 Return on Equity

Views of WESCO, NESCO & SOUTHCO

The present provision of allowing 16% Return on Equity on the approved equity capital infusion may be continued.

Views of CESU

CESU submitted that the present guideline and rates may be followed during the control period.

Views of GRIDCO

The present provision of allowing 16% ROE on the paid up capital of DISCOM may be continued and in the event ROE is not allowed it will lead to further erosion of net worth of DISCOM.

Views of Shri Sunil Bihari Das

Shri Das submitted that the Commission shall approve returned depending on the performance of four DISCOMs and the uniform return policy for four DISCOMs shall be discouraged. The equity based return model shall be approved for such DISCOMs where billing and collection efficiency is low, O&M of existing asset is poor and there is a need to improve its governance and expertise of human capital in particular. The debt based return shall be approved for such DISCOMs where there is urgent need of R&M of existing asset in order to reduce technical loss and restoration of uninterrupted reliable quality power to customer.

7.10 Trading of Power

Views of WESCO, NESCO & SOUTHCO

The three DISCOMs submitted that Commission vide its order dated September 19, 2011 directed DISCOMs to explore the possibility of direct purchase of additional power within approved BSP with a maximum ceiling of 10% of approved quantum of purchase. However, for bidding towards day ahead power purchase, DISCOMs would need to deposit amount equivalent to the bid value of power purchase on daily basis in the account of Member of Power Exchange through RTGS in advance before the trading date to enable Power Exchange Member to execute the purchase bid through Power Exchange.

The DISCOMs therefore submitted that they should be allowed to create a separate running pool account for marginal sale and purchase of power through power exchange during surplus and deficit periods in a day. This can be done by allowing to create a separate running pool account by relaxing Rs.3 Crore from Escrow account to start the marginal trading of 50 MW power and there after DISCOMs will manage day ahead surplus I deficit In different block periods.

Views of CESU

CESU submitted that in case of any additional power purchase Commission would approve the forecast of power purchase and its cost for each year for the control period. Any changes in forecast in excess of 5% of the purchase of electricity shall undergo annual revision to increase cash flow and minimal shock to the consumers.

Views of GRIDCO

GRIDCO submitted that it has a paramount role to source the power requirement of the State consumers through its role as "State Designated Entity" under the "Single Buyer Model". GRIDCO while ensuring regular and continuous quality power supply to the State, has in turn suffered accumulated losses of around RS.3000 Crore as on March, 2012 and also shoulders a loan burden of about RS.6000 Crore as on date. Added to such critical financial position GRIDCO has approval to recover only part of its ARR (Annual Revenue Requirement) through the approved BSP (Bulk Supply Price) chargeable to the four DISCOMs, in a bid to keep the tariff low, by leaving huge revenue gaps in the ARR of GRIDCO continuously over the past couple of years.

Further, in face of increased power demand of the State due to increased consumers' base (mainly on account of Rural Electrification), erratic behaviour of monsoons leading to costly sourcing of thermal power and other associated factors (increasing market rate of interest etc.) and also non-payment of arrears dues by the DISCOMs and partial payment of the current of GRIDCO by the DISCOMs, GRIDCO has been hard pressed for funds and its borrowing has touched almost Rs.6000 Crore as on date, as stated above.

GRIDCO therefore submitted that in this critical scenario, allowing DISCOMs to source power from outside under the plea of introducing competition would perhaps not be in the interest of the State consumers unless DISCOMs become viable. GRIDCO further submitted that till such time the its losses are not neutralized and the operations of the DISCOMs do not achieve various performance benchmarks fixed by the Commission such as; reduction of AT&C Losses to the approved levels, clearance of GRIDCO's Dues ViZ NTPC Bond Dues, Outstanding loan and BSP Dues, Current BSP Bills, improvement of Distribution Infrastructure, DISCOMs' contribution towards counterpart funding for the CAPEX Plan etc., these Utilities may not be considered to be allowed to source power independently. GRIDCO therefore as per the present arrangement may continue to procure power on behalf of the State till the situation improves.

GRIDCO submitted that if the power available in the States procured by DISCOMs is allowed to be sold to any entity outside the State, it will reduce the supply of power available to GRIDCO and in consequence reduce the supply to the State Consumers. Hence, trading of power to outside State by DISCOMs by purchasing power from any source in the State may not be provided in the proposed principle of MYT. GRIDCO has signed PPAs with 29 IPPs apart from PPAs with NTPC and the UMPPs. Over a period of time it is expected that GRIDCO will be able to trade power to a larger extent and earn good revenue. This revenue will not only help GRIDCO in reducing its past losses but also help in reduction of BSP in future years to come since this income will be taken into account while fixing the BSP. This reduction of BSP will help the DISCOMs to become viable to enable them to serve the consumers better.

Views of Shri Sunil Bihari Das

Shri Das submitted that DISCOMs may be allowed to buy the 'incremental' power beyond the approved level with certain modification and monitoring by OERC. The incremental power amount and energy dispatch-schedule to be disclosed to GRIDCO in advance. GRIDCO shall have first right of refusal to allow 'sale' of incremental power by DISCOM.

GRIDCO as bulk-Trader within 'Odisha, shall check 'whether' any excess power is available with GRIDCO as per disclosed 'dispatch-schedule' and is in a position to extend 'incremental' power to DISCOM in need. In case GRIDCO is unable to provide excess power the said DISCO shall be allowed to buy 'incremental' power from other sources 'within' or 'outside' of Odisha. In such case DISCOM cannot 'sale' its excess power either to other DISCOM outside the state or to any 'consumer' beyond its jurisdiction. D1SCOM within the state (intra) may be allowed for 'bulk-trading' to create competition among-themselves and 'capacity' building of the D1SCOM-professional to adopt and operate in 'open electricity' market mechanism in future. Such Multi-buyer concept can be experimented within the state (intra) and between DISCOM.

The principle or objective of DlSCOM as a company shall be, to 'serve' its 'own' consumers first and earn from its consumers only. OERC shall not allow the DISCOM to be a trader of Electricity nor to do any other business practice to earn or make profit or loss. The DlSCOM have failed in their core competency to provide 'quality'/reliable supply of electricity to its consumers and to operate & maintain the existing assets. DISCOM shall 'learn' how to earn the electricity charges from its consumers which can be achieved through Consumer Satisfaction and mutual respect and faith between DISCOM, consumers and all other stakeholders.

The Multi-Buyer concept can only be effective when the electricity market is open and the consumer has the flexibility in buying electricity at different tariff in a day as per its requirement. In the existing MYT scenario the consumer tariff rate is fixed as per the Use-Unit-Band. Since in Odisha all the PPAs signed before the year 2011 is between Generator and GRIDCO, GRIDCO may not be able to sale the excess power as per ARR – Business Plan of DISCOM at PPA price beyond its obligation or contract value.

Other Issues

7.11 Distribution Loss and AT&C Loss

Views of WESCO, NESCO & SOUTHCO

The three DISCOMs submitted that the Commission has been approving the AT&C losses based on assumption at the beginning of first business plan period; whereas the ground reality have significantly changed over the time and there is a need to review it before fixing the target for third control period.

The reasons for higher losses which are beyond the control of DISCOMs are increased rural electrification, inadequate fund for capital investment and R&M activities, lack of Govt. of Odisha's is administrative support and subsidy and increase in RST vis-à-vis BST.

The National Tariff Policy mentions that while determining the revenue requirement, improvement trajectories to be recognized at relaxed levels and not desired levels. ATE in its order for FY 2006-07 and FY 2007-08 on RST have ordered to take a relook by taking practical view of the ground realities instead of proceeding on assumption and premises while undertaking truing up exercise. Shunglu Committee has further reported that fixing retail tariffs based on normative losses ignoring the actual losses results in denial of the revenue to distribution utilities that further rocks the already fragile health of the distribution utilities. DISCOMs therefore submitted that excess loss should be on account of DISCOMs only if it is within the control of DISCOMs and they should not be penalized for the factors beyond their control.

DISCOMs further highlighted that in many States the gap between the approved distribution loss target and actual losses is within the range of 2-4% whereas in Odisha the gap has become 15-20%. DISCOMs also submitted to review the loss reduction trajectory achieved and the second control period and truing up of the same based on the prevailing conditions.

7.12 Controllable and uncontrollable parameters

Views of WESCO, NESCO & SOUTHCO

The three DISCOMs have submitted to change the controllable and uncontrollable parameters of various expenses. The employee cost which is presently controllable is proposed to be partly controllable and adjustment to be based on inflation indices during the annual truing up. Interest and finance charges are proposed to be uncontrollable as these rates are market dependent and year end adjustment to be made during annual truing up. The non-tariff income is also proposed to be uncontrollable since delayed payment surcharge, over drawal penalty etc. are of uncontrollable nature. Variation in sales is proposed to be uncontrollable since it depends on market conditions, scheme implementation, etc. and year end adjustment shall be made during annual truing up. The losses are suggested to be partly controllable and adjustment for variation in sales, rural electrification, sales mix, availability of funds, administrative support, etc. during the annual truing up.

7.13 Differential tariff

Views of Shri Sunil Bihari Das

Shri Das submitted to create different level of customers within the defined customers such as creamy layer, high networth, middle level etc. The tariff shall be different for these different clusters of customers. The high end consumers such as commercial towers, hotels etc shall pay high tariff for using the bigger chunk of natural resources as electricity consumption. The lowest cost plus tariff or free power for few years may be provided to the consumers in the area where electricity supply is given for the first time.

7.14 Control Period

Views of CESU

CESU submitted that the control period shall begin from 1st April 2010 and end on 31st March 2015 or else the control period may be extended to 3 years. The MYT principle should be flexible enough to accommodate changes in base line figures after 100% metering is complete.

8. **Concept of MYT**

A Multi Year Tariff (MYT) framework is defined as a framework for regulating the Licensee DISCOMs over a period of time wherein the principles of regulating the returns/profits of licensees and the trajectory of individual cost and revenue elements of the Utility are determined in advance. The concept of MYT gives an element of certainty to all stakeholders. The basic premise is that tariffs would not fluctuate beyond a certain bandwidth unless there are force majeure conditions. The consumer would have a fair idea of what to expect in the next five years and the Utility would also be able to plan its business having known the principles for tariff determination for the control period. The Commission would fix the guidelines which would determine the retail tariffs and having fixed the guidelines, it is expected that the tariffs would operate within a certain band.

The concept of MYT thus provides by specifying the mechanism by which costs would be adjusted based on certain principles approved by the Commission.

9. **Benefit of MYT**

The exercise to such a multi year system is expected to bring the following benefits:

i) Reduction in regulatory effort on the part of the Commission, utilities and other stakeholders.

ii) Reduction in regulatory uncertainty and

iii) Provision of a transparent and stable system of incentives and disincentives. This is because of the absence of any "claw-back" or sharing of gains over the pre-specified efficiency norms within the Control Period.

MYT provides clarity on the rules to be applied over a pre-defined future time period in advance. It seeks to eliminate the control aspects of regulation and replace them with a system of incentives and penalties. In this way, all stakeholders are made aware of the outcome of various actions/events for the pre-defined future time period, and are able to plan accordingly.

For Licensees, firstly, MYT principles provide clarity on the rules of regulation that are applied over a long term, and help finance growth and operations better, and facilitate improvement in supply quality and customer service. Secondly, the design of incentives as a part of the MYT exercise will help promote efficiency. Since some of the efficiency improvements will require time to take effect, these incentives should be applicable for a reasonably long period of time. Thirdly, these principles can help licensees mitigate risks in electricity supply.

For consumers, an improvement in efficiency gets translated into greater cost effective supply. The MYT principles are expected to result in reduction in tariffs in the long-term, as the performance benchmarks will be restated at improved levels at the beginning of every Control Period.

10. **MYT framework in Odisha**

Long Term Tariff Strategy (LTTS) for first control period FY 2003-04 to 2007-08

10.1 The Commission in its order dated 18.06.2003 in Case No.8/2003 notified guiding Principles for determination of ARR of Distribution Licensees in the State on a long term basis. The order, inter alia, defined the objectives and principles for Long Term Tariff Strategy (LTTS). These guiding principles are in conformity with Electricity Act, 2003. The principles of LTTS were set out for the control period from 01.04.2003 and was to end on 31st March, 2007 with base year as FY 2002-03 and the first year of the control period i.e. FY 2003-04 was treated as transition year. The control period was further extended for another year and ended on 31st March, 2008.

Multi Year tariff principles for the second control period FY 2008-09 to 2012-13

10.2 The Commission in Case No.133/2009 dated 28.02.2011 notified order setting out the principles of the Multi Year Tariff (MYT) for the second control period from 01.04.2008 to 31.03.2013. Therefore the third control period shall and cover FY 2013-14 to FY 2017-18.

11. **Commission's Observations**

The Commission has taken into consideration the views and opinions expressed by the objectors and the stakeholders. Commission after hearing the parties on 1.3.2013 in its interim order dated 1.03.2013 directed the following;

" a) DOE, GoO is directed to file their views on MYT and DISCOMs on assets value of RGGVY and BGJY network respectively.

b) The Commission further directs GRIDCO to furnish the data regarding release of asset hypothecated to it after payment of dues relating to NTPC Bond within a week."

The Commission has not received any views from Govt Of Odisha on MYT and GRIDCO also not furnished the data regarding release of asset hypothecated to it after payment of dues relating to NTPC Bond by WESCO, NESCO and SOUTHCO. Commission has accordingly gone ahead with this order.

12. In line with the principles defined for the first and second control period, the costs have been allocated on the basis of the risk elements involved in controlling the cost :

a) The Network and Financial costs and Aggregate Technical & Commercial (AT & C) losses are considered as controllable. Any financial loss arising from performance falling short of the targets are not recoverable through tariff. Any gain arising from performing better than targets will not be adjusted in ARR and can be retained by DISCOMs in the manner as prescribed in OERC (Terms and Conditions for Determination of Tariff) Regulation, 2004 at 5(5)(H) regarding profit sharing.

b) WESCO, NESCO and SOUTHCO submitted that employee costs shall be treated as partly controllable, Interest and finances as controllable, non tariff income as uncontrollable, variation in sales as uncontrollable and losses as partly uncontrollable. Commission has gone into the details of such submission and considers continuing the same classification of Controllable and Uncontrollable costs as defined in the second control period. Uncontrollable costs are those which are beyond the control of licensee and would be allowed as pass through in the ensuing ARR. The uncontrollable costs are

- Fuel cost charges that affect the cost of power purchase
- Inflation
- Exchange rate variation
- Force majeure condition such as changes in the laws of the land, judicial pronouncements, Govt. policies and directions and economy wide influences.

The Commission defines the following elements of cost as Controllable or uncontrollable nature for the third control period in the same line as that of first and second control period.

Controllable and Uncontrollable costs

Sl No.	ARR Item	Controllable / Uncontrollable Cost
1	Employee Cost	Controllable
2	Repair and Maintenance	Controllable
3	Administrative & General Expenses	Controllable
4	Interest and Finance Charges	Controllable
5	Depreciation	Controllable
6	Return on Equity	Controllable
7	Non-tariff income	Controllable
8	Power Purchase Costs	Uncontrollable
9	Fuel Costs	Uncontrollable
10	Taxes on Income	Uncontrollable
11	Inflation	Uncontrollable
12	Exchange rate variation	Uncontrollable
13	Force Majeure Conditions	Uncontrollable

c) The Commission in the first and second control period defined the Performance targets with an aim to improve the viability of the Orissa Power systems. Commission classified the performance target relating to the following parameters:

- Quality of supply and consumer service standards
- Aggregate Technical and Commercial loss (AT & C) and

- Network costs

These parameters of performance targets would continue to be applicable for the third control period also.

The Commission has also taken into consideration the past performance of the DISCOMs under the first and second control period while finalizing this order. Against the aforesaid backdrop the approach to MYT framework for the third control period from FY 2013-14 to 2017-18 with associated principles would be as follows:

Quality of Supply and consumer services

13. The quality of supply and customer service would be used to evaluate the performance of licensees rather than input. The Commission shall undertake the following initiatives to benchmark and monitor quality of supply and customer service. The initiative involves recording and monitoring of selected quality parameters on regular basis.

12.1 The following reliability/outage indices are specified by the Institute of Electrical and Electronics Engineers (IEEE) Standard 1366 of 1998. The Licensees will establish suitable systems to track performance against the quality parameters to find out the reliability indices namely:

(a) **System Average Interruption Frequency Index (SAIFI):** The licensee shall calculate the value as per the formula and methodology specified below.

(b) **System Average Interruption Duration Index (SAIDI):** The licensee shall calculate the value as per the formula and methodology specified below.

(c) **Momentary Average Interruption Frequency Index (MAIFI):** The licensee shall calculate the value as per the formula and methodology specified below.

Method to compute Distribution System Reliability Indices

12.2 The Indices shall be computed for the DISCOMs as a whole by stacking, for each month all the 11KV feeders in the supply area, excluding those serving predominantly agricultural loads, and then aggregating the number and duration of all interruptions in that month for each feeder. The Indices would then be computed using the following formulae:

(A) SAIFI = $$\frac{\sum_{i=1}^{n}(A_i * N_i)}{N_t}$$ Where,

A_i = Total number of sustained interruptions (each longer than 5 minutes) on i^{th} feeder for the month
N_i = Connected load of i^{th} feeder affected due to each interruption
N_t = Total connected load at 11KV in the Distribution licensee’s supply area
n = number of 11KV feeders in the licensed area of supply (excluding those serving predominantly agricultural loads)

(B) SAIDI = $$\frac{\sum_{i=1}^{n}(B_i * N_i)}{N_t}$$ Where,

B_i = Total duration of all sustained interruptions on i^{th} feeder for the month.

(C) MAIFI = $\dfrac{\sum_{i=1}^{n}(C_i * N_i)}{N_t}$ Where,

C_i = Total number of momentary interruptions (each less than or equal to 5 minutes) on i^{th} feeder for the month

Note: The feeders must be segregated into rural and urban and the value of the indices must be reported separately for each month.

The objectors during the hearing process of DISCOMs ARR petition for FY 2013-14 were vociferous in their objection regarding non-availability and quality of power to the consumers. The DISCOMs have not been able to live upto the expectations of the consumers in keeping the standard of performance as provided under OERC (Licencee's Standards of Performance) Regulations, 2004. The said Regulation defines both guaranteed standard of performance and overall standard of performance. Commission expects that DISCOMs during the third control period would adhere to these given standards and enforce mechanism as given under these Regulations. The licensees during the first year of the control period i.e. FY 2013-14 as a first step should complete consumer indexing and to achieve the standards scrupulously follow to log interruptions at the requisite points.

12.3 Other reliability parameters

(1) Voltage: Voltage variations and number / extent of excursions beyond the range permitted in the Overall Performance Standards set by the Commission.

(2) Transformer Failure: Number of Distribution Transformers (DTR) failures as percentage of total DTRs in service and time taken for replacement.

(3) New Connections: Average period of fully compliant applications for new connections pending with the Licensee for domestic, commercial and industrial categories.

(4) Metering: Percentage of non-working / defective meters, separately for domestic, commercial and industrial categories. During the second control period the percentage of working meters has been around 87% and has not improved as desired.

(5) Billing Errors: Number of billing errors identified and/or reported and prompt rectification. During the last Control Period all the DISCOMs have almost covered all the consumers through spot billing. Therefore, the billing errors are expected to have reduced considerable. However, it is observed that a number of cases are being filed before respective GRFs relating to billing errors which are mainly caused due to human error.

(6) Consumer Service: Bill payment facilities and Consumer service facilities introduced and percent of consumers availing such services;

Objectors may give their suggestions whether the monthly billing shall be related quality of supply.

14. **Aggregate Technical & Commercial loss**

The three DISCOMs WESCO, NESCO & SOUTHCO in their submissions suggested that Commission should take into account ground reality that have significantly changed over the time and review the losses before fixing for third control period.

The Commission has gone through the submission of the licensee and observes that reduction of AT&C loss is the prime objective of any distribution company. The Commission reviewed the actual AT&C loss reduction achieved by DISCOMs during the second control period. It is seen that CESU and NESCO have been able to marginally reduce overall AT&C loss of about 6% and 5% respectively whereas WESCO and SOUTHCO have increased the loss by about 3% during the control period.

The Commission in such a situation opines that within the constraints CESU & NESCO could achieve reduction in AT&C loss whereas SOUTHCO and WESCO on the other hand have increased the losses during the control period. The Commission therefore is of the opinion that AT&C losses are of controllable nature and with the launch of Govt. of Odisha CAPEX programme appreciable loss reduction during the third control period is expected. DISCOMs therefore have to bring in more capital investment through their promoters and by introducing better management skills can reduce losses which is well within their control.

The Commission recognizing the importance of computation of AT&C loss concept first defined this in the LTTS order dated 18.06.2003 and MYT order of 28.02.2011. This AT&C loss has been found to be useful in assessing and capturing both technical and commercial losses. Commission would therefore continue to assess the performance of the utilities on the basis of AT&C loss reduction trajectory during the third control period also:

13.1 The AT & C loss is decided to be used as the benchmark to assess the performance of the licensees during the control period. AT & C losses should be computed by each voltage category.

13.2 The AT & C loss combines three different but interconnected performance criteria, namely billing efficiency, collection efficiency and T & D loss. It is computed through the following formula

$$\text{AT\&C Loss (\%)} = \left\{ \left[1 - \frac{\text{Units Billed}}{\text{Units Input}} \right] \text{X} \ \frac{\text{Revenue Collected}}{\text{Revenue Billed}} \right\} \%$$

13.3 The Commission shall approve loss target for each year of the control period. The Commission shall also fix targets, both long-term and short-term, for loss reduction to bring down the loss level gradually to acceptable norms of efficiency.

13.4 The Commission may encourage incentive and disincentive schemes for the staff of the utilities linked to the reduction of losses, as per the provision of para 8.2.1(2) of the Tariff Policy.

13.5 In case the actual distribution loss exceeds the normative loss level approved by the Commission, such excess loss shall be to the account of the distribution licensee.

13.6 The Hon’ble Supreme Court of India vide its judgment dated 03.10.2002 in Civil Appeal No.4037 of 2002 with C.A.Nos.4045-51 of 2002 and C.A.Nos.6487-88 of 2002 (WBERC vrs. CESC Ltd. reported in AIR 2002 S.C. 3588 vide para 86 at page 3615 regarding AT&C Loss has held that the Commission is fully justified in fixing a normative loss so that it serves as a benchmark and serves as a target to improve their efficiency and in absence of such a norm the burden of inefficiency of the DISCOMs will be unfairly imposed on the consumers. Hon’ble Supreme Court of India in their judgement in WBERC vrs. CESC Ltd. reported in AIR 2002 in S.C. 3615 has observed as follows:

"While we agree with the Commission that it is the duty of the Company to bring down the loss under this head, at the same time, we feel that the same cannot be done in its entirety forthwith because of the reasons given by the Commission itself. At the same time, we also take into consideration the fact that the loss be it transmission or distribution is not totally beyond the control of the company, which fact is established by the admission made by the respondent company xxxxxxxxxxxxxxxx. Therefore, the problem with which the company is now faced in regard to this loss is very much contributed by the inaction on the part of the Company. Therefore, we are of the opinion that the Company should bear a substantial part of this loss by itself rather than seeking to transfer the entire burden on the consumers."

The Hon'ble Apex Court has therefore held that distribution loss is controllable and power of the Commission to fix the normative loss has been well recognized.

15. **Sales and power purchase**

The Commission has gone into the details of the submission of the DISCOMs who have submitted to adopt Bottom Up Approach to determine the ARR for DISCOMs considering sales as uncontrollable parameter. The power purchase cost is determined as per the Regulation 4 and principles thereof laid down in the OERC (Terms & Conditions for Determination of Tariff) Regulations, 2004 . The said principle enumerates that the quantum of power purchase shall be estimated on the basis of actual purchase made during the previous financial year(s), actual to the extent available for the current year and any projects for the balance period of the current year with appropriate adjustments for any abnormal variations during the period.

In line with such principle the Commission approves the forecast of power purchase and power purchase costs for each year of the control period in the Business plan order relevant to the control period. In line with the LTTS order for the first control period and MYT order for the second control period, these forecasts would not normally undergo annual revision, except in the case of variations in excess of 10% in the quantum of purchase of electricity, caused due to exceptional circumstances.

16. **Network costs**

The Commission in the LTTS order defined these cost components and how those would be treated during the first control period. These costs are expected to be managed by the licensees and would be allowed for the control period ex-ante in line with the LTTS order for the second control period also. These principles are discussed as below:

O & M Costs

16.1 Employee Cost

The three DISCOMs, WESCO, NESCO & SOUTHCO submitted to provide employee cost through indexation mechanism linked to CPI during the control period in line with the model FOR MYT Regulations. CESU submitted to take into account the employee cost due to massive RGGVY expansion of network. DISCOMs also submitted that incentive and dis-incentive scheme may be introduced to improve productivity level.

The Commission after considering the submissions has decided to continue with the employee cost allocation in the ARR on the same principles as adopted during the second control period.

Wages and salaries during this control period would include the base year values of Basic pay and Grade Pay escalated for annual salary increments and inflation based on Govt. of Odisha notification. The sixth pay recommendation notified by Govt. of Odisha recommends annual increment @ 3% of the Basic and grade pay. The annual increment would be approved as per such recommendation. Basic Pay and grade pay are to be taken from annual audited accounts of the Licensee. However if as per the Commission's assessment the figures shown in the audited accounts cannot be relied upon, the Commission may take into account the actual payment outgo during the last six months of the year to arrive upon the pay for the ensuing year. Dearness Allowance, HRA and other allowance would be calculated as per rates notified by Govt. of Odisha. Terminal liabilities would be provided based on a periodic actuarial valuation to be made by OERC in line with the prevailing Indian accounting standards. The financial impact of any award by Govt. of India/Govt. of Orissa shall be taken care of in subsequent year in truing up.

The Commission further directs that the DISCOMs may submit any incentive and dis-incentive scheme for improving the productivity of employees by 30.9.2013.

During the last control period all the DISCOMs have taken recourse to appointment of franchisee of different models in order to outsource billing and collection activities. On analysis of Franchisee Operation during the second control period it is revealed that the DISCOMs have divested one of their major activities of billing and collection activities in about 50% of their operational areas. In view of such a scenario the employee cost should come down appreciably in the next control period due to outsourcing of the major activities of billing and collection. Besides franchisee DISCOMs also engaged outsourced and contractual employees to undertake customer care, billing and collection activities. Commission would look into such aspect while finalizing the employee cost during the approval of ARR in the control period. Indexation of employee cost during the control period may not be necessitated as commission takes into account the audited figures of the previous years to arrive employee cost. Commission also conducts annual truing up based on the available audited accounts of the DISCOMs and true up the actual employee cost vis-à-vis the cost approved in the ARR.

16.2 Repair and Maintenance (R&M)

R&M is being allowed @ 5.4% applied on the opening Gross Asset Value as per the principle enunciated in the LTTS order for the first control period and MYT principle for the second control period and it is proposed to be continued in the next control period also.

As regards allowing of R&M expenses towards assets added under RGGVY and BGJY schemes, the said added assets are still owned by Govt. of Orissa and are yet to be transferred to the respective distribution companies. As per the principles of MYT R&M is allowed at the rate of 5.4% of the Gross fixed Assets of the distribution companies. It is, therefore, imperative that such assets are transferred to the distribution companies first and thereafter R&M would be allowed on those added assets. In view of such a scenario the R&M expenses would continue to be allowed at the rate of 5.4% of GFA only on assets owned by the respective distribution companies for the third control period.

During the last few years of the control period Commission has been allowing an additional sum of Rs. 7 crores to each DISCOMs on provisional basis for maintenance of assets added under RGGVY programme besides the normal R&M expenditure of 5.4% on the Gross Fixed Assets. Govt. of Odisha has not submitted their views on MYT and DISCOMs on assts value of RGGVY and BGJY network. The Commission would therefore continue to allow provisionally additional amount for maintenance of these assets. The Commission observes that there is also no segregation of the assets pertaining to BGGY and RGGVY assets by the DISCOMs. DISCOMs are directed to segregate these assets which are added to their network and furnish the same by 30.09.2013.

During the last control period it is seen that due to insufficient collection by the DISCOMs there was very little amount left in the escrow account to be released by GRIDCO for Repair and Maintenance work.

The Commission since 1999-2000 have approved in total an amount of Rs.1275.29 crore till 2011. However, DISCOMs have only been able to spent Rs.746.20 crore which is mainly due to insufficient collection on account of which GRIDCO could not release the requisite amount from the ESCROW account.

There is also very less capacity addition in terms of capex to add to the assets of the DISCOMs consequently the gross fixed assets have seen to be decreasing over the years.

The Capex programme of Govt. of Odisha which has already been lunched is likely to register substantial progress during the control period which would hopefully lead to significant upgradation of network such as transformers, lines, meters etc.

In view of the above, the Commission during the third control period would continue to grant R&M at the rate of 5.4% on Gross Fixed Asset added during the year. As regards the R & M expenses for the assets added under RGGVY and BGGY programme Commission may provisionally allow an amount for maintenance of these assets during the third control period.

The Commission may also allow special R&M during this control period in order to enable DISCOMs to undertake critical activities such as loss reduction, energy audit, Consumer Indexing, Pole scheduling etc.

16.3 Administrative and General (A&G)

During the second MYT control period, A&G expenses was allowed @ 7% escalation over the base year value in ARR during the previous year. Commission during the previous control period in the Annual Revenue Requirement has allowed A&G in two parts. One part being the normal A&G Expenses allowed @7% escalated over the base year value during the previous year’s approved value. The second part being the additional expenses in addition to the normal A&G expenses for special measures undertaken by the DISCOMs towards reduction of AT&C losses, improving collection efficiency, payment of statutory Govt dues and for undertaking other important tasks which are allowed after prudent check.

No adjustment in ARR is allowed to be made on account of actual values being different from these performance targets for the O & M costs during the control period.

The Commission during the third MYT control period would continue to allow normal A&G expenses at the rate of 7% escalated over the approved base year value of the previous year. Commission may also approve additional expenses in addition to the normal A&G expenses for special measures to be undertaken by the DISCOMs towards reduction of AT&C losses and improving collection efficiency after prudent check.

17. **Bad & Doubtful debt**

The Commission allows Bad and Doubtful debts as per 5(f) of the OERC (Terms and Conditions for Determination of Tariff) Regulations, 2004. DISCOMs have submitted that due to increase rural electrification particularly at LT level, bad and doubtful percentage may be considered to be increased. During the previous control period (FY 2002-03 to 2007-08), Commission allowed Bad and Doubtful debt as 1% of the total annual revenue billing in HT and LT sales during the last two years of the second control period.

The Business Plan order of the Commission dated 20.03.2010 approved collection efficiency of 99% for FY 2011-12 and FY 2012-13. The benchmark of collection efficiency would continue to be at the level of 99% during the third control period also. Accordingly the Bad and Doubtful debt during the third control period would also be allowed @ 1% of the total annual revenue billing in HT and LT sales only.

18. **Capital Expenditure**

Capital investments cover expenditure on fixed asset augmentation and interest to meet variety of needs such as Load growth, reduction of losses, maintenance of network, improvement of voltage profile, quality of supply, system reliability, metering, communication, computerization etc.

In line with the MYT order for the second control period, the Commission during the third control period would approve the capital investment plans for ongoing and future investments. Adjustments in the ARR shall be made for variations in actual and forecast values and the impact of such variations on the ARR at the end of the control period.

Licensee could retain financial benefit arising out of savings in financing costs due to faster implementation at lower costs because of better project management or procurement practices. Financial losses on account of time and cost overrun to be on account of the licensees only.

Govt. of Odisha have in the meantime launched Capital Expenditure (CAPEX Programme) for DISCOMs of Odisha for providing financial support to the tune of Rs.2400 crore in the distribution sector which includes the grant of Finance Commission, State budgetary support and counter part funding by DISCOMs. The basic objective of this programme is system improvement, establishment of reliable system, reduction of AT&C losses to a sustainable level and improvement of quality of supply to the consumer of the state. The scheme envisages investment of Rs. 2400 Cr. to be spent under the scheme over the period of four financial; years i.e. FY 2010-11 to FY 2013-14, out of which Govt. of Odisha provide Rs. 1,200 Cr. and DISCOMs will invest Rs. 1,200 Cr. from their own source/ or through market borrowing.

Under this Govt. of Odisha CAPEX programme some amounts have already been received by the DISCOMs. However, if the said programme moves forward as per the desired goals it would give huge boost to the system improvement and AT&C loss reduction. DISCOMs submitted that arranging counterpart funding as their share of CAPEX programme is challenging as FI/Banks are not lending them any loan on this account. GRIDCO suggested that all the projects that get completed should be allowed as pass through and capitalization of interest during construction (IDC) for approved capital investment plan may be allowed.

GRIDCO has not furnished the data regarding release of asset hypothecated to it after payment of dues relating to NTPC Bond by WESCO, NESCO and SOUTHCO. Commission has dealt this issue in Case No. 107 of 2011 dated 29.03.2012 where in at para 14 (iv) it was directed as follows:

"(iv) Out of the assets hypothecated to GRIDCO on account of NTPC bond, GRIDCO may retain hypothecated assets limiting to Rs. 250 crore and balance hypothecated assets may be released before 31.05.2012 in order to enable NESCO, WESCO & SOUTHCO to approach the financial institutions for loan."

GRIDCO shall accordingly release hypothecated assets and three DISCOMs, NESCO, WESCO & SOUTHCO shall pay their dues to GRIDCO as per the direction in the said order.

The Commission in line with the provisions contained in Regulation 5(A) of the OERC (Terms and Conditions for Determination of Tariff) Regulations, 2004 would approve the cost corresponding to the approved investment plan of the licensee for a given year which will normally be considered for its revenue requirement.

19. **Depreciation**

Depreciation is linked to the useful life of the assets, calculated on the straight line method. The value base shall be the historical cost of the asset.

DISCOMs submitted to allow depreciation on assets created under RGGVY programme and at the post-94 rates as notified by Govt. of India.

The Hon'ble High Court of Orissa in its order dtd. 28.02.2003 and modified order dtd.14.03.2003 directed that the depreciation is to be calculated for the pre-upvalued assets at the pre-1992 rates as notified by the Govt. of India. In view of the directives of the Hon'ble High Court, the depreciation during the third control period would be calculated and allowed on the pre-upvalued assets at pre-1992 rates as notified by the Govt. of India.

Any variation between projected and actual cost would be adjusted at the end of control period based on the actual asset.

The residual life of the asset shall be considered as 10% and depreciation shall be allowed upto maximum of 90% of the historical capital cost of the asset. The asset considered for depreciation should be commensurate with the approved investment plan and capitalization schedule for each year of the control period.

Depreciation shall not be allowed on assets funded by consumer contribution (i.e. any receipts from consumers that are not treated as revenue) and capital subsidies/grants. Provision for replacement of such assets shall be made in the capital investment plan.

20. **Financing costs of long term liabilities**

During the second control period the Commission allowed interest on the approved capital investment plan. Adjustments in ARR are made for variations in actual and forecast values of interest costs on loans raised for financing capex. In view of the principles adopted for the second control period Commission would allow the interest on the approved capital expense in the ARR. Adjustment in ARR shall be made on account of variation in forecast and actual value of interest cost on loans raised for financing capital expenditure in truing up. No adjustments would be made normally to the interest cost relating to loans existing at the beginning of the control period except in circumstances if there are changes on account of Government policy or securitization of the past dues.

21. **Financing costs of short term loans/cash credits for working capital**

DISCOMs have submitted to allow working capital as per model MYT Regulation of FoR. The Commission during the first control period allowed Working capital as the shortfall in collection beyond the target set for collection efficiency minus amount approved towards bad and doubtful debt.

As per the principle in the LTTS order for first control period and MYT order for the second control period, the amount of working capital is the approved shortfall in collection minus amount approved towards bad and doubtful debt. Since the benchmark collection efficiency target is set at 99% for the third control period, the remaining 1% would be treated as Bad and Doubtful debt. Hence there is no allowance for working capital for during the third control period.

22. **Shareholder returns**

The Commission allowed 16% return on equity on the approved equity capital infusion during the first and second control period. The Commission had observed that return on equity incentivises the investor for the equity infusion to the business. A return of 16% suitably covers the risk associated with the distribution business. The Commission would continue to allow 16% return on equity on the approved equity capital infusion. Adjustments on account for variations between the actual and approved values of equity capital shall be made in the ARR subsequently in truing up.

23. **Costs arising out of Force-Majeure conditions**

In the event of large variations in demand or supply of electricity in excess of 20% due to extreme or disruptive weather conditions, cyclones, earthquakes etc., the Commission after review of its impact on the entire tariff structure may allow in the ensuing year or create regulatory asset to be recovered over a few years.

No such occasion arisen during the 2nd Control Period.

24. **Revised Forecast**

The Commission considers the submission made by the DISCOMs in the ARR and may allow revising the forecast sales and purchase. The Commission subject to variations in excess of 10% in the quantum of purchase of electricity may consider revising forecasts for reasonableness and consistency before approving ARR.

25. **Trading of Power**

The three DISCOMs WESCO, NESCO & SOUTHCO submitted to be allowed to create a separate running pool account for marginal sale and purchase of power through power exchange during surplus and deficit period in a day. GRIDCO however opposed for any allowance to DISCOMs to trade in power being its role as State designated agency to procure power for the State of Odisha. GRIDCO apprehended that DISCOMs if allowed to trade power would sale the power outside the State and in turn hamper the interest of the State. GRIDCO also submitted that Commission is leaving gap in its ARR to be bridged through the trading of power. The income from trading of power also helps in reducing the past losses.

The Electricity Act, 2003 recognizes trading as a distinct licensed activity and distribution licensees require no separate license for trading of electricity. The Commission during the second control period as per the provisions of the Electricity Act, 2003 intended to introduce competition in Bulk Supply by allowing the Distribution Licensees to procure their incremental power requirements i.e. beyond the approved level of power purchase from any source. Purchasing power directly by the licensee would initiate the multi-buyer market as envisaged in the Electricity Act, 2003. This would also help Licensee to improve its capacity to schedule and dispatch energy and make accurate forecast for power purchase and sales so essential for implementing Availability Based Tariff (ABT) in the state. Any gains or losses on account of such procurement and supply of incremental power shall not be considered towards ARR.

In Odisha the responsibility of bulk purchase of power is vested with GRIDCO through an arrangement known as Single Buyer Model. GRIDCO thereby is obliged to sell power on priority basis to the four DISCOMs upto their full requirement and the DISCOMs are obliged to buy power only from GRIDCO. GRIDCO is a deemed trader under the Electricity Act, 2003 and carries on trading of electricity in bulk inside the State and also inter-state trading. Under this arrangement DISCOMs hitherto have not been allowed to trade electricity outside the Odisha since they can only procure power from GRIDCO.

However, during the third control period Commission intends to allow the DISCOMs to sale the incremental power only to any entity outside the State subject to the proviso that the losses and gains arising there from shall not form a part of licensees revenue requirement. This is in consonance with the provisions under Electricity Act, 2003 in order to bring about competition and multi-buyer of Electricity in the State of Odisha.

26. **Procedure and Review**

The control period shall begin from 1st April, 2013and shall end on 31st March, 2018. These MYT principles shall apply to the ARR determination of the DISCOMs in the state of Odisha from 1st April, 2013.

The base years for the MYT principles are deemed to be taken as the FY 2008-09 to 2012-13 the years of the second control period.

27. **Periodic Reviews during the control period and future projections**

The Commission shall make periodic reviews of the licensee’s performance during the control period to address any practical issues, concerns or unexpected outcomes that may arise and in general to assess the efficacy of the MYT principles. If any changes occur in the structure of electricity sector due to legislation Commission may make appropriate modifications to the MYT principles as and when required.

28. **Business Plan for FY 2013-14 to 2017-18**

Commission had approved the Business Plan of four DISCOMs relating to the second control period (FY 2008-09 to 2012-13) in its order dated 20.3.2010. Commission in the said Business Plan approved various targets to be achieved by the DISCOMs during the second control period relating to Power Purchase, Distribution Loss, Collection Efficiency and AT&C Loss Reduction. Commission in the meantime also directed all DISCOMs to file their Business Plan for 3rd control period starting from 2013-14 to 2017-18. DISCOMs have accordingly filed their Business Plan relating to the third control period which would be subsequently heard and targets pertaining to Power Purchase, Distribution Loss, Collection Efficiency and AT&C loss reduction would be approved for this control period. Due to considerable delay in submission of Business Plan filing by the DISCOMS, Commission has considered these targets for FY 2013-14 which is the first year of the third control period same as that were approved for the last year of the second control period i.e. FY 2012-13.

Applicability of MYT principles

29. These principles are deemed to have been applied to four DISCOMs in Orissa from 1st April 2013 and shall remain in force until a subsequent amendment or revision is necessitated.

The DISCOMs shall file their ARR for FY 2014-15 to 2017-18, based on the above MYT principles. Since DISCOMs have already filed ARR for FY 2013-14 the Commission have considered the principles setout in this MYT order while approving the ARR for FY 2013-14.

30. **Summary of MYT principles now approved in this Order are here as under:**

(a) Quality of supply and consumer service standard – These parameters would be used to evaluate performance of licensees rather than input. The licensees would have to establish suitable system to track performance against the quality parameters listed in this Order.

(b) The AT&C loss shall be used as the benchmark to asses the performance of licensee during the control period.

(c) Distribution Loss and Collection efficiency approved by the Commission in the Business Plan order for the third control period (FY 2013-14 to FY 2017-18) would be considered for computing ARR of the Licensees. No adjustment in the truing up would be made on account of the distribution loss being more or collection efficiency being less than the approved parameters respectively.

(d) Employee cost is considered to be as controllable cost and linked to efficiency. Terminal liabilities would be allowed as per valuation by independent actuary. The financial input of any award by Govt. of India/Govt. of Odisha shall be taken care in truing up.

(e) Repair and Maintenance expenses would be allowed at the rate of 5.4% of Gross Fixed Assets (GFA) only on assets owned by the distribution company. Additional Special R&M may be allowed for loss reduction activities, Energy auditing and any other activity assessed to be necessary to upgrade the system.

(f) Administrative and General Expenses would be allowed @7% escalation over the base year value in ARR. Additional A&G would also be allowed for special measures undertakes by the DISCOMs towards reduction of AT&C losses and improving collection efficiency.

(g) Bad and Doubtful debt would be allowed 1% of the total annual revenue billing in HT and LT sales.

(h) Depreciation- In view of the direction of the Hon'ble High Court the depreciation would be calculated and allowed on the pre-upvalued assets at pre-1992 rates as notified by Govt. of India.

(i) Financing cost of long term liabilities – The interest would be allowed on the approved capital expense in the ARR. Adjustment would be made on account of variation between forecast and actual value of interest cost on loan in truing up.

(j) Working Capital: No working capital would be allowed during the third control as the collection efficiency has been fixed at 99% and Bad & Doubtful debt at 1%.

(k) Shareholders return (ROE) – ROE would be allowed @16% on approved equity capital infusion.

(l) Sales and power purchase- Sales and purchase of power would normally be allowed as per such approval in the Business Plan order for the third control period (FY 2013-14 to FY 2017-18). Variations in excess of 10% in the quantum of purchase of electricity, caused due to exceptional circumstances would only be allowed for revision during the control period.

(m) Force Majeure Condition: In the event of large variations in demand or supply of electricity in excess of 20% due to extreme or disruptive weather conditions, cyclones, earthquakes etc., the Commission after review of its impact on the entire tariff structure may allow in the ensuing year or create regulatory asset to be recovered over a few years

(n) Trading of Power. Licensees would be allowed to sell the surplus power if any to any entity outside the State subject to the condition that the losses and gains on such account shall not form part of the licensee’s ARR and trading would not be made without meeting the state demand approved by the Commission in the respective ARRs.

(o) Controllable and uncontrollable costs would be as indicated in para 12 (b) which is extracted below:

Sl No.	**ARR Item**	**Controllable / Uncontrollable Cost**
1	Employee Cost	Controllable
2	Repair and Maintenance	Controllable
3	Administrative & General Expenses	Controllable
4	Interest and Finance Charges	Controllable
5	Depreciation	Controllable
6	Return on Equity	Controllable
7	Non-tariff income	Controllable
8	Power Purchase Costs	Uncontrollable
9	Fuel Costs	Uncontrollable
10	Taxes on Income	Uncontrollable
11	Inflation	Uncontrollable
12	Exchange rate variation	Uncontrollable
13	Force Majeure Conditions	Uncontrollable

31. Accordingly the case is disposed of.

Sd/-	Sd/-	Sd/-
(S.P. Swain)	**(B.K. Misra)**	**(S.P. Nanda)**
Member	**Member**	**Chairperson**