

**ORISSA ELECTRICITY REGULATORY COMMISSION
BIDYUT NIYAMAK BHAWAN
UNIT -VIII, BHUBANESWAR - 751012**

**Present : Shri D.K.Roy, Chairman
Shri H.S. Sahu, Member**

Case No. 29 & 30 of 2000

Grid Corporation of Orissa Ltd. Petitioner

Vs

- 1. Central Electricity Supply Company of Orissa (CESCO)**
- 2. Western Electricity Supply Company of Orissa (WESCO)**
- 3. North Electricity Supply Company of Orissa (NESCO)**
- 4. Southern Electricity Supply Company of Orissa (SOUTHCO)**

Respondents

- 5. Orissa Hydro Power Corporation (OHPC)**
- 6. Orissa Power Generation Corporation (OPGC)**
- 7. Govt. of Orissa represented through Secretary, Deptt. Of Energy.**

Affected Parties

**Date of argument : 27.12.2000
Date of order : 16.03.2001**

ORDER

1. M/s GRIDCO the holder of Orissa Transmission & Bulk Supply Licence had filed one application for approval of the re-scheduling of certain loans and issue of certain bonds and another application for approval of its Financial Restructuring Plan (FRP). The Commission examined both the applications and admitted these applications as Case No.29 and 30 of 2000. These applications were filed in pursuance of condition nos. 10 & 11 of the Orissa Transmission and Bulk supply license, which make it mandatory for the Licensee to obtain written approval of the Commission for major investments and for disposal of assets in any manner.

2. As the subject matters of both the cases were inter-linked, the Commission decided to hear and dispose of the matter together. Both the Cases were accordingly heard together and are being disposed of by this common order.
3. In the case no.30 of 2000, Financial Restructuring Plan (FRP) the applicant, M/s GRIDCO had arraigned the four Distcos as respondents and accordingly the Commission issued notices to them to appear and file their replies. As the FRP proposed by the applicant has major implications for all stakeholders, the Commission decided to implead the generating companies of the State i.e., OHPC & OPGC as well as the State Government as affected parties in this case.
4. The respondents and the affected parties appeared before the Commission, filed their replies and put forth their respective arguments. The Commission heard the respondents and the expert views of the Director (Tariff), OERC and carefully considered the applications, the replies supported by relevant documents and the arguments advanced by the parties.
5. The licensee M/s GRIDCO is passing through a serious financial crisis and is in acute need of infusion of fresh capital. The applicant has felt that the up-valuation of assets at the time of asset transfer during the formation of GRIDCO from OSEB, has been the primary reason for the current financial crisis. The facts preceding the FRP application may be restated to put the case in proper perspective.
6. The transfer of assets from OSEB to GRIDCO was carried out after the revaluation of the same, thus leading to an increase in the revenue requirement of GRIDCO in subsequent years, due to additional depreciation on the capitalized assets, enhanced requirement for operations and maintenance costs, increased employee costs and return on revalued capital base.
7. This also meant that the Govt. of Orissa, could adjust its dues to GRIDCO, against the notional receipts to itself, through this transfer. It was believed at that point in time, that subsequent performance improvements would ensure the viability of GRIDCO and the newly formed Distcos. It is obvious that expectations have been belied and performance improvements have not materialised. The transfer process was structured in a fashion, where the Govt. of Orissa, offset its dues to GRIDCO, against the upvaluation amount, and consequently wrote away Rs. 340 crores of power bills and unpaid subsidies, which otherwise would have accrued to GRIDCO.

The power purchase liability amount of Rs. 318.7 crores (Rs. 465.5 cr. Accounts payable netted off against the Rs. 146.8 cr receivables), of OSEB was transferred to GRIDCO, which started off commercial operations, with this liability figure.

8. It was stated by GRIDCO that on account of the initial cash deficit and obligation to service substantial fresh debt and bonds, it was driven to the wall by the creditors necessitating a series of measures including issue of bonds through private placement (Rs. 310 crores), issue of bonds to generators (Rs. 360 crores) and rescheduling of loans of the power finance corporation (PFC) and Rural Electrification Corporation (REC). It is admitted by GRIDCO that these palliatives

only served to postpone the day of reckoning and GRIDCO has landed itself in a debt trap.

9. The Board of GRIDCO noted that its cash deficit for 1999-00 would go upto Rs. 500 crore and that options such as raising more funds from the open market, approaching generation companies for further conversion of overdue payments to bonds or approaching the state govt. for loans, grants or subsidies were no longer available to GRIDCO. Hence it felt the need for an overall financial restructuring.

10. The FRP has been designed on the basis of assumptions in the following aspects:

- i. transmission losses,
- ii. reductions in distribution losses by the Distcos,
- iii. changes in costs of power purchase,
- iv. capital investments both ongoing and planned,
- v. addition of generation capacity and
- vi. likely Bulk Supply Tariff increases over the period under consideration.

11. The plan assumes assistance from all the stakeholders, namely the National Thermal Power Corporation, financial institutions, state generating stations, state govt. and central govt. The support envisaged is in the form of a reduction of obligations to these, concessions in terms of sale, issuance of bonds to these entities by GRIDCO, in lieu of financial obligations, and certain concessional provisions to be made by the Govt. of India.

- i. The generators will defer the collection of receivables from GRIDCO by accepting long-term bonds, and DPS would be waived.
- ii. Power Finance Corporation and Rural Electrification Corporation will reschedule their loans and these will be refinanced by tax-free bonds.
- iii. The Govt. of India would have to allow tax-free status to these bonds.
- iv. The distribution companies would have to reduce the T& D losses and make timely payments of bulk supply bills as well as timely repayment of loan interest and installments on the basis of the back-to back arrangements.
- v. Government of Orissa would guarantee the bonds and also provide cash support over 5 years towards accumulated defaults and to cover cash deficits remaining after these measures.
- vi. OERC would be approached to increase the tariff at a desired rate.

12. The following are the salient components of the amended FRP presented to OERC by GRIDCO

- | | |
|---|----------------|
| i. Dues to Central Generating stations to be securitised by issue of tax free bonds | Rs. 600 crores |
| ii. REC and PFC loans to be discharged by issuing tax free bonds with state Govt. guarantee | Rs. 800 crores |
| iii. GRIDCO's dues to state owned generating companies | Rs. 560 crores |
- a. Rs. 360 crores of the dues to the state govt. and OHPC would be managed through the issue of tax free bonds with State Govt. guarantee. The balance would be paid out of soft loans receivable from the World Bank.
- b. The WB would be approached to provide another Rs. 200 crores for managing deficits until the turnaround of GRIDCO.

13. Besides these certain other measures as a part of FRP have been approved in the 52nd meeting of the Board of GRIDCO. These are as follows:

- i. Rs. 340 crores taken out of GRIDCO at the time of the first transfer scheme, would be reinvested in GRIDCO, by disinvesting OPGC and OHPC equity.
- ii. Set off of government dues against corresponding GRIDCO dues
- iii. Conversion of zero coupon bond to equity
- iv. Reduction of staff strength by 10%
- v. Waiver of DPS and penal interest

14. GRIDCO had submitted the following main documents for the FRP :

- i. projected financial statements upto FY 09-10.
- ii. Detailed investment schedules and justifications for the same

As per these:

- i. GRIDCO would turnaround in the FY 04 and earn profits of Rs. 98.7 crores for the year.
- ii. Gross assets would be increased by Rs. 2141.9 crores from Rs.1426.6 crores as on 99-00 to Rs. 3571.5 crores by 2010.

Presentation by affected parties

15. The first hearing on the FRP was held on the of 8th November, 2000 during which the following views were expressed:

- a. The OPGC expressed its inability to accept the proposal given by GRIDCO, stating that the issue of bonds by GRIDCO to itself was not an attractive proposition. It also maintained that the waived of DPS and penal charges on non-payment of dues was not an option it was considering.
- b. The OHPC submitted a response to the FRP stating that despite being the cheapest power supplier to GRIDCO, its dues were mounting and that GRIDCO, was honouring liabilities of other suppliers like NTPC, OPGC, etc. prior to paying the dues of OHPC. The total outstanding as on 31st October, 2000 stood at Rs. 400.40 cr., and since there is no inflow of funds, from GRIDCO, and no commitments of early settlement of dues, the FRP would put additional burden on the finances of OHPC.
- c. Southco in its written submission has stated that FRP assumes an indicative profile of Bulk Supply Tariff (BST) for the next 5 years, which in Southco's view amounts to a multi-year tariff and a violation of Section 26 of OER Act. It does not agree to the claim that the 10-15% increase p.a. in Bulk supply tariffs in the first 4 years will have no impact on the retail supply tariffs. Hence Southco prayed the Commission not to consider any BST increase, and to consider giving clarifications for the amount of new loans, interest for which could be passed through in future tariff applications.
- d. Southco reserved the right to estimate load growth on a year-to-year basis at the time of filing of the revenue requirements, and did not accept the figures quoted by GRIDCO.
- e. Southco disputed the loss reduction figures quoted by GRIDCO, and offered the following loss reduction targets: 3% p.a. for the first 3 years and 2 % p.a. in the 4th and 5th years. Further it wanted the surplus generated by this loss reduction to be allowed to itself to service loans for capital expenditure, system improvement, own incremental expenditure and unabsorbed losses. It prayed the Commission not to allow GRIDCO, to build in or claim any surplus generated out of distribution loss reduction by Southco in the FRP.
- f. Southco has challenged the capital expenses of GRIDCO of the order of Rs. 1315 crores as against the capital base of Rs. 1155 cr., without any corresponding increase in energy procured for distribution companies. It held that any investment designed to sell power to third parties other than distribution companies, should not be increasing the cost burden of the distribution companies in terms of the BST. The cost of assets not used or not productive should be written off by GRIDCO, and not loaded on to the Distribution companies.

- g. Southco also held the view that the disputed dues of the distribution companies with GRIDCO should be resolved as per procedure, which would resolve the cash deficit problem of GRIDCO. The undisputed amounts could be squared by the issue of bonds by the distribution companies, which could be then reassigned by GRIDCO, on to NTPC. In light of all the above, Southco wanted the rejection of the FRP.
- h. WESCO and NESCO held similar views on the FRP.
- i. CESCO held that the loss reduction programme envisaged by GRIDCO was too ambitious. It contended that if all the assumptions taken by GRIDCO were fulfilled, CESCO might be able to achieve a loss reduction of 2.5% p.a.
- j. The govt. of Orissa, held the view that given the current financial situation of Orissa, it would be extremely difficult for it to infuse any equity into GRIDCO or to intervene financially.

Views of the Consultants on the FRP

16. The Commission appointed M/s Verve Consulting Pvt. Ltd. for examining the various aspects of the Financial Restructuring Proposal. The Consultants carefully studied the FRP, its assumptions and its utility and the consequences of the same. After taking into account the analysis made by the consultants, the Commission formulated a set of queries for the respondent.

17. Verve Consulting in its draft report made the following observations on the FRP:

- i. FRP in its current form is not a proper deficit-financing model as it is merely relying on loans to discharge liabilities. The use of the loans for achieving efficiency gains through investments in technology upgradation, (spending not merely on meters but also improving grid interconnectivity, and hence creating opportunities for interstate sales) appears to be missing.
- ii. The time period, for which projections have been made, seems to be too short considering that some of the loans are being infused in mid-course (additional borrowings in year 01 and 02) and that repayments are starting late in the projection period.
- iii. Since the FRP has far reaching ramifications all the stakeholders should have been involved. All the distribution companies in the hearing have challenged the assumptions made by GRIDCO specifically in regard to the projected performance of the Distcos.

Transmission Loss

18. Transmission loss in GRIDCO has been projected at 4.86% for FY 00 (since actual data is not available as yet) and at 5.30% for subsequent years. This in the opinion of the Consultants is too high and is not reflective of the system improvement investments, expected to be made, as well as those already in motion. The OERC has recommended loss levels of 3.7% as normative transmission losses to be applicable from the year FY01.

Load Growth

19. The load growth is not commensurate with the increase in capital investment. A calculation of the demand forecasts from FY00 to FY10 suggests that load growth is 8.3% for the year 2004, which does not match with realistic projections.

Year	FY 00	FY01	FY02	FY03	FY04	FY05	FY06	FY07	FY08	FY09	FY10
Distco Sales	5,758	5,918	6,088	6,376	6,903	7,013	7,275	7,551	7,866	8,259	8,672
Incr%		2.8%	2.9%	4.7%	8.3%	1.6%	3.7%	3.8%	4.2%	5.0%	5.0%

There is an aberration in BST for FY 2000, with BST calculated being Rs. 1.22 whereas that used for the model is Rs. 1.28. Besides the final projected BST appears to be very high. The application for BST for the year 2001-02 made to the Commission (@ Rs. 1.79 per unit of power purchase), also does not match with the figures given in the FRP (Rs. 1.58 for FY 2001 and Rs. 1.76 for FY 2002).

Loss Reduction

20. Assumptions on reduction of Distribution loss, have not been agreed to by the Distribution companies (as shown in their prayer to commission) on behalf of which GRIDCO has set the assumptions and they considered these reduction targets as unrealistic.

Loans

21. *Loan retirement* : The loan retirement plan is to be analyzed as the costs of the various loans would dictate the priorities of GRIDCO. However the DSCR has to be maintained at a healthy level to enable the same. The interest costs for all the loans need to be calculated to ensure the accurate computation of the loan retirement strategy, and as has been mentioned earlier, the interest computations given are incorrect.
22. *Debt Service Coverage Ratio (DSCR)*: Any DSCR of less than 2.0 is worrisome for any financing institution. The current FRP suggests that the moment turnaround is achieved, the debts are going to be retired, en masse, which leads to DSCRs as below.

- i. This obviously implies that the earning potential of GRIDCO is being utilized to retire debt too hastily in the period FY 06-10, whereas prior to this period there is inadequate earning potential. It also means that there is a mismatch in the term of the loans, as loans are taken in a period, when there is an inability to service them.
- ii. Besides the implications of the earlier comments are that earning levels are going to be lower, as the allowable losses by the commission, have been usually lower than that achieved. Hence the utilities while working with higher losses will only have allowable losses to pass on to consumers, leading to lower margins and hence lesser debt serviceability. Hence we might have to work with an even lower DSCR, than that presented below.

Year	00	01	02	03	04	05	06	07	08	09	10
DSCR	0.5	0.2	0.7	0.6	0.8	0.9	1.5	1.6	1.4	1.7	4.1

Based on these deliberations, the commission raised the following queries for the respondents:

Queries

23. Based on the analysis of the consultants the following queries were made by the Commission to GRIDCO on the 29th November 2000 on the FRP.

- i. Whether GRIDCO had explored equity infusion alternatives ?
- ii. What were the alternatives for liability reduction of GRIDCO ?
- iii. What were the short and long term measures contemplated by GRIDCO for power inter-state exports?
- iv. The load growth projection by the Distcos from 99-2000 to 2010 is of the order of was only 12.96% against a projected fixed asset addition of 170%. Hence what degree of restrictions can be imposed on investments so as not to burden consumers ?
- v. Without significant load growth, whether loan funds could be used to retire other expensive debt instead of asset building ?
- vi. Whether GRIDCO had received assurances from related sources about waiver of DPS/ Penal interest from generators/ FIs as stated in the FRP ?
- vii. Whether the investments could be prioritised to give importance to power exports rather than internal strengthening ?
- viii. The legality of the tax free bonds and the precedents if any were required to be furnished.
- ix. The impact of the BST on the retail tariff needed to be reexamined.
- x. The interest calculations for loans alongwith the basis of interest calculations as well as the repayment schedules was required
- xi. The calculations for gross block, depreciation and net block and capital WIP did not add up
- xii. Are VRS costs included in the employee cost calculations or not ?
The financial effects of attrition of employees was required

- xiii. The repayment ability of GRIDCO in the event of adverse change in earnings leading to inability to service debt needs analysis
- xiv. Transmission loss is above normative levels and hence the effect of system improvements on technical loss needed to be demonstrated alongwith variance from norms
- xv. The basis of employee costs, A&G costs to be given
- xvi. The latest audited accounts are required to be submitted

Clarifications from GRIDCO

The following clarifications were received from the respondent on 19th December 2000.

Equity infusion

24. GRIDCO had requested Government of Orissa (GoO) to convert Rs. 400 crores zero coupon bonds into government equity in GRIDCO. The Secretary (Energy) has indicated to the Board of GRIDCO that the GoO has agreed to this.

The high-powered committee of the Ministry of Power of Government of India (GoI) in its interim proposal had recommended an infusion of Rs. 340 cr. through equity or soft loans, ensured through direct GoI payment to NTPC by deductions from Central Plan Assistance (CPA) over and above the existing 15% ceiling on CPA cuts in case of GoO default. This money could be raised through divestment from OHPC/ OPGC and failing this the earlier mechanism could be enforced.

25. Dis-investment does not seem to be a realistic proposition given the un-viability of the sector. Further dis-investment in the distribution companies would not raise significant cash given the current poor performance of the Distcos and the low levels of equity holding of GRIDCO in these (39%).

Power export

26. The sale to other states is contemplated at the current levels till 2010, as it is not contemplating new interstate lines. It has negotiated a deal only with AP, although it has connections with MP and West Bengal too. GRIDCO is now focussing on improving internal systems, though it is willing to consider investments in EHT lines if other states are willing to commit to purchasing power from GRIDCO.

Load growth

27. Statistical calculations between 1974 and 2000 indicate a load growth of 68.4%. The growth between the years 1991 and 2000 is 81.5%. (Reference: Annexure I of Clarification to queries submitted by GRIDCO vide letter no. dated 19th December 2000). A conservative load growth estimate of 12.96% has been assumed from 2000-2010. These projections have been made in the absence of any projections made by the Distcos. The loss reduction figures have also been assumed by GRIDCO, at an annual reduction of 5% for 3 years and 2.5% for the subsequent 2 years.

The base figure for losses are the actual loss figures reported for the year 2000. The power procurement from generators by GRIDCO was based on the energy requirement of the Distcos.

Asset building

28. The 400 kV and 220 kV lines have enough loading currently with much lower substation loads and new line and substations at 132 kV to reduce the losses in the excising 33 kV lines are required.
29. About 75% of the capital expenditure upto FY05 are towards a few critical projects, planned for contingencies as well as for long term sectoral benefits, for providing crucial evacuation facilities (thus lowering the cost of power procurement). GRIDCO however seeks the approval of OERC for the same. Capital expenditure beyond FY05 is assumed at a normative value of Rs. 90 crores.
30. The process of construction of EHT lines and substations takes about 5 years, and hence procurement action has been initiated on the same, on the basis of the report prepared by Monenco Agra on the line requirements, with funding from REC, ADB, OECF, PFC, HIW, DFID and from internal resources. The criterion for design of the Transmission system is on a single contingency basis, i.e. on the outage of any single element, the system performance should continue to be satisfactory, without the need for load shedding and with voltage within permissible limits at any of the substations.
31. The existing voltages in the GRIDCO stations are lower than the permissible limits, thus necessitating the immediate strengthening of the system. Data supporting this has been furnished by GRIDCO, with the voltages at the 132 kV and 132 kV substations given as per which 9 nos. 132 kV substations and 4 nos. 220 kV substations are operating below these limits.
32. The details of the capital expenditure works undertaken by GRIDCO have been given by GRIDCO. The necessity of the following have also been given as follows:
 - i. 220 kV Ib TPS- Budhipadar

This is required for evacuation of generation capacity at Ib when the second stage of generation capacities comes up. The existing double circuit 220 kV line needs to be augmented to manage the entire generation capacity.
 - ii. 400 kV Chandaka-Meramandali

The available voltage being lower than permissible, this will strengthen the supply and prevent voltage collapse.

iii. 400 kV Ib to Meramandali

This is under construction and will help remove the system collapse in the event of outage of one of the 2 existing TTPS-Bhanjanagar 20 kV lines.

iv. 220 kV Budhipadar-Bolangir

This double circuit line will reinforce the power supply at Bolangir currently supplied by a single circuit 132 KV line.

33. GRIDCO has also provided data highlighting the need for augmenting transformer capacities at a number of substations, with a view to increasing the reliability of power supply.

Liability reduction

34. GRIDCO has expressed the view that it has continuously been trying for waiver of DPS and reduction of penalties with the central PSUs, and this has culminated in the committee of the Ministry of Power (MoP) asking for waiver of penalties and DPS by all the central PSUs. However the PSUs are apprehensive of setting a precedent in Orissa, which could be used by other reforming states to reduce their dues to these PSUs. This view has been publicly expressed by the PSUs. However GRIDCO has managed to obtain settlements in its favour with regard to DPS and a waiver of 25% of the same from NTPC. It has also managed to reschedule its loans with REC/PFC.

Rescheduling of investments

35. There is no avoidable investment by GRIDCO and it is GRIDCO's view that reliable power supply can not be continued with the current state of the system, unless fresh investments are made.

Legality of tax-free bonds

36. There is no similar precedent. However GRIDCO is optimistic after its negotiations with MoP and DEA. The Secretary DEA has ruled out other alternatives and has conceded that this seems to be the only viable alternative, in the inter-ministerial committee in which the Finance ministry has also been represented. GRIDCO has also pointed out that there is no cash loss to the GoI as only a potential opportunity of gaining from tax would be lost as there would be no bond issue otherwise and hence no tax receipts from the same. The tax-free nature of the bonds would also improve their marketability thus providing larger benefits to the bond issuing entities.

BST-Retail tariff

37. The assumptions on this topic as made by GRIDCO are as follows :
- i. Costs other than power purchase are 30% of the total costs of the Distcos
 - ii. No increase in these other costs have been assumed for the next 10 years.
 - iii. A decrease in distribution loss percentage of 5% p.a. for the first 3 years and 2.5% for the subsequent years till the overall loss percentage reaches 20%

GRIDCO has shown the impact of a rise in BST on the retail tariff in its reply.

Interest calculation

38. The interest calculation details have been furnished by GRIDCO.

Fixed Asset Mismatch

39. The corrected Funds flow statement reflecting all the details of the gross block, interest capitalized, net block, depreciation and capital work in progress have been furnished.

Employee costs

40. Staff reduction in the next 3 years shall only be through natural attrition and no VRS scheme has been proposed. The employee costs increase annually by 6% with an intermittent 15% increase every 5 years to take care of fitment and wage revision.
41. The details of the basis of the employee costs, A&G costs and the interest calculations are based on the FY98 audited accounts and the management accounts of FY99 and FY00

Debt Service Coverage Ratio

42. The average DSCR is 1.56 over the period FY00 to FY10, with a DSCR of 4.3 in FY10.

Transmission loss

43. The transmission loss of 5.3% of the FRP has been calculated on the net basis which equates to a 4% loss on gross basis. Further changes have not been taken into account.

Observations of the Consultants on the Clarifications

44. The impact of BST on retail tariff as has been presented in the Clarification, shows some interesting figures. There is a huge increase in units sold in the year 2004, which has not been supported by any significant load growth in the power sector in Orissa. The subsequent BST increase in FY 2006 also appears to be justified only by the induction of fresh generating capacity through IPPs, which at this point of time appears uncertain at best. It is interesting to note that the calculations given by GRIDCO does not take into account the implications of the Bonds to be issued to the tune of Rs. 960 crores, as given in the FRP. The impact of the bond servicing costs is bound to affect the BST dramatically and in fact could significantly alter all the projections given in the FRP.
45. The loss reduction targets set for the Distcos in the FRP are unrealistic especially in the light of the performance in this regard till date. The Commission has allowed level of 34% T&D losses to the Distcos in their tariff applications, for FY 01, owing to the poor compliance with earlier targets. Hence non-compliance by the Distcos to these loss levels would imply the failure of the model used in the FRP or would necessitate large tariff rises.
46. The FRP can even be seen in the light of realistic and achievable performance parameters set for Distcos, which would fundamentally alter the financial projections. The calculations for the same are given in the Annexure, based on a possible alternative scenario for Bulk supply tariff. In the event of loss projections being higher than given in the FRP, and taking the Commission's approved loss figure of 31%, and a progressive reduction of 1% p.a., the domino effect of this, create a series of opportunities. On the one hand, Distcos are given realistic targets to achieve in terms of distribution and transmission losses, and are incentivized for performances surpassing these benchmarks, leading to a creation of repayment ability. This would also help them clear outstanding liabilities especially in the context of term loans and power purchase dues. On the other, GRIDCO, would have a larger power purchase requirement, due to the larger no. of units of power required to be sold to the Distcos. Taking into account, the contribution of every additional unit of sales, a larger volume of sales would translate into, lower bulk supply tariffs, and better revenue streams. The cash flow management would also be eased, as the requirement of funding for shortfalls and accrued liabilities could be reduced through this improved revenue inflows.
47. The impact of the earlier scenario is far reaching in terms of the overall FRP. The current FRP, projects a healthy GRIDCO by the year 2006. This coincides with the commencement of the repayment of the large quanta of borrowing from the World Bank and other sources. Hence any fresh liabilities undertaken during the current financial as proposed in the FRP, would be offset by the larger earning potential in 2006. However in the revised plan, as presented in the Annexure, there is a smaller requirement for the borrowings envisaged leading to lower burden of debt for the consumer, and hence lower revenue requirements for GRIDCO and consequently lower BST.

The Debt Service Coverage ratios improve considerably in the period 2000-2006, leading to a creation of ability to repay the current debt and not to reschedule the same to a later year, thus creating a leaner financial profile for GRIDCO. In the event that Distcos can manage a better loss reduction programme, the benefits of the same can be utilized by them to prepay their contingent liabilities and improve sectoral health.

48. The current deficit of GRIDCO is partly due to the lack of punctual repayments by the Distcos. This aspect is expected to be remedied, after better implementation of the escrow mechanism, which did not function in the desired manner, for the first few months. It is expected that some of the shortfall in funds will be met from the accumulated dues of the Distcos and this will yield substantial relief to GRIDCO.
49. The schedule of investments detailed out by GRIDCO, would have to be accepted in the absence of more substantive data, but GRIDCO is advised to carefully weigh the merits of each investment proposition, as it is felt that system security, which is what is hoped to be achieved, through these investments should not be established only through elaborate transmission networks which remain significantly underloaded. A thorough load flow analysis needs to be carried out for these HT and EHT lines planned, along with contingency plan for maintaining system stability for unanticipated events and developments.
50. It is the Consultants opinion, that the Current FRP, be amended suitably with realistic performance benchmarks and subsequent revision of all the projections. However this is contingent upon GRIDCO, achieving the stipulations laid down by the Commission, vis-à-vis Transmission losses, managing the current deficit through issuance of bonds, conversion of bonds into equity and securitisation of outstanding liabilities. As is evident, the process of convergence towards ideal performance targets, is gradual and each step is arduous. Hence it would be unwise on the part of the Commission to guarantee financial packages based on current performance and each decision of the Commission would have to be contingent on the situation prevalent, to ensure the best deal for all stakeholders in the sector.

ABT and its impact

51. Availability based tariffs are expected to be introduced by May 2001 in power sector in India. This is going to have far reaching implications for all the players in the sector. We present below a comparative picture of the existing system and how it is likely to change in the event of introduction of ABT.
52. Under the ABT regime beneficiaries may transfer part of their allocated share for a specified period to other states. Consequently, GRIDCO has to aggressively promote inter-state sales as it could have a surplus in years of slow load growth. After ABT, the central sector power (in this case NTPC) is also likely to change significantly. Therefore GRIDCO will have to analyse options on surrender of costly power unless long term trading can be ensured at appropriate price.

53. Optimal forecasting of advance day schedules and committing to it will warrant investments in forecasting, dispatch and monitoring systems apart from accurate metering of consumption. The issue of ABT has not been factored into the FRP and might prove to be critical in the final analysis.

Deficit financing

54. The FRP has been designed to infuse cash into a cash-starved company, with a bright foreseeable future, given the right operating conditions. The cash is to be infused only in the form of borrowings, though book adjustments are sought through the conversion of govt. bonds into equity. However the reasons for the deficit and the current burden of liabilities are not difficult to find. A significant proportion of the deficit is the legacy of GRIDCO prior to privatization of distribution. The deficit has burgeoned thanks to the inability/ unwillingness of Distcos to pay their legitimate dues to GRIDCO. However it is the view of the Consultants that GRIDCO, can not seek relief for the imperfections in performance during the period from April 1, 1996 to March 31, 1999 for the 3 distribution companies WESCO, SOUTHCO and NESCO and till August 31 1999, for CESCO, during which time it managed the power distribution business in the state along with its current activities in transmission and load dispatch.

Observations of the Commission

55. The Commission has carefully looked into the proposals for financial restructuring and for the rescheduling of certain loans and bonds made by GRIDCO to tide over the financial crisis. The views and analyses of the consultants were discussed at length with the licensee through technical meetings at the level of the Director (Tariff) and subsequently all important issues were raised during the open hearings. It is as clear as daylight that GRIDCO is in a debt trap, from which it has to find a structured solution and hence a proposal for FRP is an understandable step. Before we record our observations, on some of the specific components of the FRP and pass our orders, it is appropriate to give our observations on the genesis of the financial problem necessitating the FRP and whether the problem could have been avoided or its dimensions diminished. Our observations are called for in pursuance of the mandate under the OER Act, 1995 and particularly Section 11 of the Act to regulate the working of the licensees and to promote their working in an efficient economic and equitable manner.

56.

56.1 We agree with the petitioner GRIDCO that the cash problems of GRIDCO started at the moment of its birth when the GoO upvalued its assets by Rs. 1153 crores and adjusted a good part of receivable against the dues of the state govt. and passed on to GRIDCO, payables to NTPC and other creditors on 1.4.96, amounting to Rs. 465.5 crores.

56.2 Secondly the financial modelling in the reform programme had an inherent flaw with regard to the assumption on prevailing levels of T&D loss, the pace of reduction in T&D losses, possibility of improvement in revenue generation in the short term and the load growth in the sector. In this context,

we look at the projections made in the Staff Appraisal report (SAR) dated April 1996 by the World Bank and corresponding projections by GRIDCO in the FRP.

Loss Target	1997	1998	1999	2000	2001	2002
System Loss Target as per SAR	40%	35%	30%	25%	23%	22%
System Loss As per FRP submitted by GRIDCO	52% (Actual)	48% (Actual)	46%	40%	35%	30%

T&D losses will reach a target level of 20 percent in FY 06 as per the FRP, which is a postponement of SAR objectives by 5 years. Even so, these loss reduction targets have not been acceptable to the Distcos as they consider it too ambitious.

Debt service	1997	1998	1999	2000	2001	2002
DSCR Target as per SAR	1.5	1.5	1.5	1.5	1.5	1.5
DSCR As per FRP	0.3	0.4	0.3	0.5	0.2	0.7

56.3 We are constrained to observe that the congenital financial problem has aggravated due to the inadequacy and inability of GRIDCO, to function as a corporatised licensee, to take corrective measures for arresting the downslide and for taking proactive steps for its own financial viability. It continued to function more or less as a wing of the Govt., without concern for its own finances, it took up responsibility for unremunerative distribution related work and it bore the burden of loans and payables to make the divestment process attractive to the private investor. The writing on the wall was quite clear with regard to the unviable nature of the financial model handed down by the SAR. The T&D losses did not go down as expected, load growth did not materialize, the internal burden kept on rising and the distribution companies did not pay their dues and the tariff rise granted by OERC was short of expectations. These should have led to the reassessment of its strategy, rescheduling of investments, economy in expenditure and proper asset management. It is quite clear that the hesitant release of World Bank funds from the govt. of Orissa, and procedural bottlenecks have handicapped GRIDCO. But on its part it did precious little to improve its managerial efficiency and financial viability.

56.4 The main objectives of reform, to make the sector financially viable so as to attract private capital and to relieve the Govt. of the burden of investment and subsidy are bound to be defeated if fund management and asset management are regulated to secondary place. It is unfortunate that this has happened for very many reasons, not the least being GRIDCO's continuation of "business as before" approach and failure to imbibe corporate philosophy and corporate strategies. It is also a fact that the distribution

companies did not help matters and that allocation of all the risk and responsibility by the Govt. of Orissa, to GRIDCO was the bane of GRIDCO. GRIDCO has not been able to get the benefit of an undiluted commercial relationship with the Distcos because it holds 49% of the shares of these companies, the chairman of both GRIDCO and the Distcos is common and GRIDCO has been the medium of communication and financial dealings of the Government with the Distcos. The structural unbundling of transmission and distribution has been diluted and enforcing accountability has become difficult. Trade Payment of electricity charges by Government Departments has contributed to the malaise.

56.5 Having observed all that with regard to the genesis of the financial problem, we however agree with GRIDCO that loans are to be rescheduled and the FRP needs to be approved so that Reform is brought back on the rails.

A decision in this regard brooks no delay because of the essential nature of the product we are regulating and the inherent monopoly in providing service to the consumers of the state.

57. The Financial restructuring plan as proposed by GRIDCO will leave GRIDCO with negative networth and a very large debt burden. As per financial projections if all goes right, as proposed by GRIDCO, it may have a positive net worth in the FY 04-05. However we find that the requirements for this scenario are extremely demanding and tough to fulfill in the current climate.
58. As pointed out in the last tariff order, it is not reasonable to burden the present consumers on account of the past and present inefficiency of the licensees in realizing their dues. Further the licensees will not be able to match expectations if they do not follow the guidelines incorporated in the tariff order. For example we have fixed the overall T&D loss at 34% for FY 2002. Similarly we have reiterated the order about the ceiling on various items of expenses the licensee should incur for transmission and supply of electricity.
59. Non-conformance with the earlier orders of the Commission and spending beyond the realistic levels, have led to the licensee incurring heavy losses. The FRP represents an attempt for the securitization of the same. This is because, the additional liabilities being proposed are all geared towards meeting fund requirements and not so much towards fresh investments.
60. While accepting FRP for mitigating past losses and getting GRIDCO to improve its viability, capital investments as proposed by GRIDCO may not be accepted in totality. It is seen from the financial projections that GRIDCO has loaded investments on the system without proportionate revenue growth. Projected capital expenses should not be construed as approved unless they are vetted by the Commission and unless cost-benefit analyses as per the license condition are carried out.
61. The Commission has noted the following errors and omissions in the FRP presented by GRIDCO :

- a. The calculations for the FRP is flawed, as it does not include the financial impact of the tax free bonds of Rs. 960 cr. proposed by GRIDCO. On the other hand Gridco proposes additional Rs 1560 crores as additional borrowings without indicating the source of funds and the rate of interest.
 - b. The transmission loss level assumed by GRIDCO is at 5.3% as opposed to the benchmark level of 3.7% fixed by the Commission.
 - c. The provision for bad and doubtful debts has been treated as an operating expense, which is not allowed by the Commission for transmission companies.
 - d. The net receivables for the sale of power have been reported to be negative for the years FY 06 onwards and all calculations dependent on the same figures need to be recomputed.
 - e. BST for FY 01 has been fixed by the Commission at Rs. 1.38 per unit and not at the levels reported in the FRP (Rs. 1.51 per unit for FY 01) and the consequent annual percentage increases in BST needs to be recalculated alongwith the rest of the FRP.
 - f. The income tax provisions as applicable to GRIDCO need to be checked to ensure the accurate provision of the same. Income tax needs to be applied when the retained earnings of the company gets out of the red, which as per the FRP is FY 07.
62. We may observe that the FRP should have been more aggressive to reallocate the risks and responsibilities. As GRIDCO alone was not responsible for the financial morass, it was desirable that sacrifices were made by the Govt., the PFC, REC, NTPC, the generation and distribution companies in induction of capital, waiver of dues and complete waiver of DPS rather than postpone the dues so that they are taken care of by efficiency improvements

Conclusion

1. The Commission is of the view that GRIDCO may be accorded in principle approval of the FRP, though it believes that certain conditions would have to be fulfilled before the FRP runs its full course.

The retail tariff levels as proposed in the FRP is based on the BST calculations. The projections have not taken into account, the debt servicing due to the Tax free Bonds to be issued by GRIDCO. On the other hand they have proposed additional borrowing to the tune of Rs 929 crores in year 2001 and further Rs 631 crores in year 2002. This will definitely impact the BST as well as the Retail Tariff thus upsetting some of the crucial FRP assumptions.

2. We are not in a position to give clearance and commitment for future tariffs, as these will be dealt separately on a year-to-year basis in accordance with the OER act. One of the fundamental assumptions of the FRP is that the Bulk Supply tariff hikes which are necessary for the sustenance of GRIDCO, in the post FRP arena, will not affect the retail tariffs and hence not be a burden on the consumers. However the Commission does not consider it appropriate to comment on the tariff related issues of the FRP, without the full materialization of the stipulations of the same. It has to keep its option to scrutinize the tariff applications independently and in light of the circumstances at the time of application for tariff changes.

The load growth assumptions have been suitably amended by GRIDCO, to make them more realistic, but the investment scheduling requires to be further tightened in a crisis situation, as is currently prevalent in the sector. There must be commitment from the Distcos on the performance assumptions like load growth, transmission and distribution losses, etc. and they must be involved in the process.

3. The success of the FRP depends very clearly on the shared sacrifices to be made by various other stakeholders in the power sector, as also by the state and central governments. Without adequate and timely commitments from these, the FRP might not see the light of the day. Hence it is imperative that the GRIDCO, obtain the necessary guarantees and get financial benefits, flowing before pursuing the further implementation of the FRP. The Commission shall need to be fully satisfied with the compliance with the corresponding assumptions of assistance from these stakeholders before allowing the FRP to run its course.
4. It is the view of the Commission, that power sector reform is a gradual process, where the successful completion of each constituent step is the primary precondition for undertaking the next. In fact, the degree of success achieved in each step would also dictate the size of the next. Hence it reserves the right to revisit benchmarks set in each order, inasmuch as this helps in creating a better environment for the overall fulfillment of the objectives of reform. This order does not aim to legalize the requirements set forth in the FRP and the amended FRP, and should be seen as a facilitating device in the overall sectoral improvement and rehabilitation.
5. It is relevant to note that a bold step for radical reform of power sector was taken by the Govt. of Orissa in a totally untrodden path of unbundling, privatisation, independent regulation and cost-reflective tariff. The whole of this country is benefitted from the lessons and experiences of this dynamic experiment. As Orissa hit the roadblock of cash crunch by adopting the so called World Bank model of reform, other states on the threshold of reform have reoriented the model and the pace of their power sector reform and Govt. of India has also recently devised a scheme of one time settlement of SEB dues. Hence in the fitness of GRIDCO the main player who has borne the brunt is not left high and dry; and that the benefit of one time settlement of dues recently decided by the Govt. of India should first be granted to Gridco. Even otherwise we strongly recommended that the Govt. of Orissa, Govt. of India, World Bank, the DFID, PFC, REC and the generators offer their financial assistance through one-time settlement, waiver of dues and fresh loans to revive GRIDCO from a financial morass, which is not entirely of its own making. We also direct the distribution licensees to improve their performance and revenue collection clear up the dues of GRIDCO in time so that the risks and gains of reform of the sector are equitably shared by all stakeholders. We request that Government of Orissa ensures timely payment of electricity dues to all the Distribution Companies.
5. With the observations given above the Commission grants in principle approval of the financial restructuring plan indicated in paras 12 & 13 of this order and plan for rescheduling of loans as contained in their application dated 19.09.2000 vide case No.30/2000 dt.30.09.2000 and 29/2000 dt.19.09.2000 respectively. GRIDCO with the support of the Govt. of Orissa must plead with the Govt. of India and the funding

agencies for one-time settlement, waiver of dues and fresh loans and after taking the results into account, implement the financial restructuring plan to revive GRIDCO so as to put it on recovery path towards viability.

Sd/- (H.S. SAHU)
MEMBER

Sd/-(D.K. ROY)
CHAIRMAN