CENTRAL ELECTRICITY REGULATORY COMMISSION
NEW DELHI

Petition No. 151/2010

Coram: Dr. Pramod Deo, Chairperson
Shri S.Jayaraman, member
Shri V.S.Verma, Member
Shri M.Deena Dayalan, Member

Date of Hearing: 28.9.2010
Date of order : 21.12.2011

In the matter of

Seeking clarification in regard to reimbursement of the liability on account of FERV and the cost of hedging with regard to the operation of Regulation 40 of the Central electricity Regulatory Commission (Terms and Conditions of Tariff) Regulations, 2009.

And in the matter of

NTPC Ltd, New Delhi …. **Petitioner**

Vs

1. Uttar Pradesh Power Corporation Ltd., Lucknow
2. Jaipur Vidhut Vitran Nigam Ltd., Jaipur
3. Ajmer Vidhut Vitran NIgam Ltd., Ajmer
4. Jodhpur Vidyut Vitran NIgam Ltd., Jodhpur
5. Delhi Transco Ltd., New Delhi/DISCOM of Delhi
6. Haryana Power Purchase Centre, Panchkula
7. Punjab State Electricity Board, Patiala
8. Himachal Pradesh State Electricity Board, Shimla
9. Power Development Deptt., Govt. of J&K, Srinagar
10. Power Department (Union Territory of Chandigarh), Chandigarh
11. Uttarakhand Power Corporation Ltd., Dehradun
12. Madhya Pradesh Power Trading Co. Ltd., Jabalpur
13. Maharashtra State Electricity Distribution Co. Ltd., Mumbai
14. Gujarat Urja Vikas Nigam Ltd., Vadodara
15. Chhattisgarh State Power Distribution Co. Ltd., Raipur
16. Electricity Department, Govt. of Goa, Panaji, Goa
17. Electricity Department, Administration of Daman & Diu, Daman
18. Electricity Department, Administration of Dadra & Nagar Haveli, Silvasa
19. West Bengal State Electricity Distribution Co. Ltd., Kolkata
20. Bihar State Electricity Board, Patna
21. Jharkhand State Electricity Board, Ranchi

22. Gridco Ltd., Bhubaneswar
23. Power Department, Govt. of Gangtok, Sikkim
24. Eastern Power Distribution Company Ltd., Visakhapatnam
25. Southern Power Distribution Company Ltd., Tirupathi
26. Northern Power Distribution Company Ltd., Warangal
27. Central Power Distribution Company Ltd., Hyderabad
28. Electricity Department, Govt. of Puducherry, Puducherry
29. Tamilnadu State Electricity Board, Chennai
30. Kerala State Electricity Board, Thiruvananthapuram
31. Bangalore Electricity Supply Company, Bangalore
32. Mangalore Electricity Supply Company, Mangalore
33. Chamundeshwari Electricity Supply Corporation, Mysore
34. Gulbarga Electricity Supply Corporation, Gulbarga
35. Hubli Electricity Supply Company, Hubli
36. Assam State Electricity Board, Guwahati ...**Respondents**

The following were present:

1. Shri A.V. Rajware, NTPC
2. Shri K. Sreekant, NTPC
3. Shri Ajay Dua, NTPC
4. Smt. Alka Sehgal, DGM, NTPC
5. R.B. Sharma, BSEB & Gridco
6. Shri Gopal Prasad, Advocate, JSEB

ORDER

The petitioner, NTPC Ltd has filed this petition seeking certain clarifications with regard to the operation of Regulation 40 of the Central Electricity Regulatory Commission (Terms and conditions of Tariff) Regulations, 2009 (hereinafter “2009 regulations”), particularly the use of hedging, the extent and mechanism for recovery of the cost of hedging and reimbursement of extra liability due to Foreign Exchange Rate Variation from the beneficiaries.

2. The petitioner has submitted that NTPC has taken foreign currency loans over the years in different currencies for construction of its power plant assets. Regulation 40 of 2009 regulations allowed hedging of the foreign currency loans and permitted recovery of cost of hedging as well as extra liability arising out of the Foreign Exchange Rate Variation (FERV) for the foreign loans not hedged. The petitioner has examined the system of hedging in detail and has found that the mechanism of hedging of the foreign exposure arising from foreign currency loans has many variations and a number of options are available for management of the foreign exchange risks. The cost of hedging foreign exchange debt depends upon the amount and tenure of the hedge, currencies involved, hedging instruments etc. The cost of hedging is also charged by the banks in many different ways depending upon the instruments selected and in some instances, is built into the exchange rates/interest rates without separate identification. In the above context, the petitioner has sought clarifications regarding the use of hedging, the extent and mechanism for recovery of the cost of hedging and reimbursement of extra liability due to foreign exchange rate variation from the beneficiaries. The petitioner has submitted that the clarifications will enable the petitioner to take up hedging of the foreign exchange exposure after formulating a suitable foreign exchange risk management policy.

3. The petitioner has sought clarification on the following four issues related to hedging:

(a) **Disharmony between Regulation 40(1) and 40(3) of 2009 regulations:** While Regulation 40(1) provides discretion to the generator for hedging the exposure to FERV, Regulation 40(3) permits the recovery of liability on account of FERV to the extent the generating company is not able to hedge the foreign exchange exposure. The petitioner has sought a clarification as to whether the discretion given under Regulation 40(1) is not intended to be curbed by Regulation 40(3) of 2009 regulations.

(b) **Problems arising out of difference between normative and actual loan:** Hedging of foreign currency loans can be done only when there is actual loan outstanding and for a tenure not exceeding the loan maturity. Difference between outstanding loan and normative loan would arise because the former is subject to contractual repayment while the latter depends on the amount and apportionment of loan repayment allowed in tariff. Hedging of normative loan is not possible if there is no actual loan or to the extent the normative loan is in excess of actual loan outstanding.

(c) **Cost Recovery Issues:** The petitioner has sought clarification as to (i) whether cost of hedging is recoverable corresponding to the normative loan outstanding from year to year or corresponding to repayments and interest payment due in a year; (ii) whether premium of hedging should be recovered upfront or as and when incurred; (iii) recovery of difference between hedge rate and exchange rate as on 31.3.2004 or the date of commercial operation, as the case may be; (iv) recovery of hedging cost and FERV in case of cross currency swap; and (v) recovery of hedging cost in case of swap of foreign floating rate loan with Indian fixed rate loan.

(d) **Hedging of Interest Rate Risk:** Regulation 40 is not clear whether a company is permitted to swap foreign currency loans availed on floating interest rate to fixed interest rate basis to hedge against Interest Rate Risk.

4. The petitioner has submitted that the clarification on the above four issues are necessary so that there is no dispute at the time of recovery of the liability on account of FERV and hedging expenses from the beneficiaries. The petitioner has further submitted that pending clarification by the Commission, NTPC does not propose to hedge the

foreign currency loans to the extent of normative loan and would recover the extra rupee liability towards interest payment and loan repayment corresponding to the normative foreign currency loan in the relevant year in terms of Regulation 40(3) of 2009 regulations.

5. Replies to the petition have been filed by Uttar Pradesh Power Corporation Limited (UPPCL) and Gujarat Urja Vikas Nigam Limited (GUVNL). The petitioner has also filed rejoinder to the replies. We have heard the representative of the petitioner and UPPCL, and ,the learned counsel for Bihar State Electricity Board (BSEB) and Jharkhand State Electricity Board (JSEB) and representative of UPPCL.

6. Before we examine the issues raised by the petitioner for clarification, it would be appropriate to recapitulate the background facts leading to the enactment of Regulation 40 in 2009 regulations. Section 61 of the Electricity Act, 2003 (hereinafter referred to as "the Act") provides that 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 various principles and factors mentioned under section 61 including the National Electricity Policy and Tariff Policy. Government of India, Ministry of Power notified the Tariff Policy

vide Resolution dated 5.1.2006. Para 5.3(e) of the Tariff Policy provided for the cost of management of foreign exchange risk in the following terms:

> " (e) Cost of Management of Foreign Exchange Risk
>
> Foreign exchange variation risk shall not be a pass through. Appropriate costs of hedging and swapping to take care of foreign exchange variations should be allowed for debt obtained in foreign currencies. This provision would be relevant only for the projects where tariff has not been determined on the basis of competitive bids."

7. The Commission in exercise of its power under section 178 read with section 61 of the Act initiated the process of specifying the regulations for terms and conditions for determination of tariff for the control period 2009-14. The Commission posted on its website on 29.8.2008 the draft regulations on terms and conditions of tariff alongwith an Explanatory Memorandum inviting comments or suggestions or objections from the stakeholders and general public. Keeping in view the provisions of para 5.3 (e) of the Tariff Policy, draft Regulation 14 dealing with Foreign Exchange Rate Variation provided as under:

> "14. **Foreign Exchange Rate Variation.** (1) The generating company or the transmission licensee, as the case may be, may hedge foreign exchange exposure in respect of the interest on foreign currency loan and repayment of foreign loan acquired for the station in part or full, as per their judgment considering the market behaviour.
>
> (2) Every generating company and transmission licensee shall recover the cost of hedging of foreign exchange rate variation corresponding the normative foreign debt, in the relevant year on year-to-year basis as expense in the period

in which it arises and extra rupee liability corresponding to such foreign exchange rate variation shall not be allowed against the hedged foreign debt.

(3) To the extent the generating company or the transmission licensee is not able to hedge the foreign exchange exposure, the extra rupee liability towards interest payment and loan repayment corresponding to the normative foreign currency loan in the relevant year shall be permissible provided it is not attributable to the generating company or the transmission licensee or its suppliers or contractors.

(4) Every generating company and the transmission licensee shall recover the cost of hedging and foreign exchange rate variation on year-to-year basis as income or expense in the period in which it arises."

8. The rationale for the above provision in the draft regulations was elucidated in the Explanatory memorandum as under:

"10.0 Treatment of FERV
10.1 The existing regulation provides that every generating company and transmission licensee shall recover FERV on year to year basis as income or expense in the period in which it arises. Recoveries from or payment to the beneficiaries on account of FERV are done directly. The Commission has so far not allowed hedging of foreign loans. The tariff policy says that FERV risk shall not be a pass through. It further provides that appropriate costs of hedging and swapping of loans to take care of foreign exchange variations should be allowed for the debt obtained in foreign currencies.

10.2 The money market developments offer a range of products and derivatives for hedging/swapping of foreign currency exposures and the Commission encourages the utilities to make use of the financial products available and to hedge their exposures to the extent considered feasible and use their expertise in this direction.

10.3 It is also recognised that small generating companies and transmission licensees do not have the expertise or capability to take appropriate forex hedging instruments and hence such arrangement may not be practicable for them. Again, utilities cannot obtain forward covers for the entire foreign exposure in one instance which could be obtained in phased manner depending on cost of hedging, prevailing market conditions etc. It has also been gathered after discussion with the industry and the financial institutions that generally a company does not go for hedging of the entire amount of foreign loan due to various reasons like perception about variation in a particular foreign currency due to political and economic situations; mix of foreign currencies in the basket of foreign loans availed and hedging of each such currency may not necessarily be beneficial. In case of some foreign currencies, hedging may not be available.

100% hedging is not likely to be the main optimal forex risk policy and may not reflect the least cost option for customers.

10.4 As such, in line with the tariff policy, the Commission decides to allow the cost of hedging of foreign currency exposure. However, in view of the above realities it has been provided in the proposed regulation that to the extent hedging is not resorted to, FERV shall be allowed as pass through."

9. After considering the comments received in response to the draft regulations and oral submissions made during public hearing, the Commission finalised the Central Electricity Regulatory Commission (Terms and Conditions of Tariff) Regulations, 2009 which was notified in the Official Gazette on 20.1.2009. Draft Regulation 14 was included in the final regulations without any change in the contents or language and was renumbered as Regulation 40 in the 2009 regulations. The reasons given in the Statement of Reasons with regard Regulation 40 are extracted hereunder:

"3**5. FERV(Regulation 40)**

35.1 Generation and transmission utilities are of the opinion that both the cost of hedging and impact of FERV should be allowed as a pass through without imposing any condition of attributability. NTPC proposed that FERV prior to date of commercial operation should be allowed to be capitalized. They also proposed amendment of para 14(3) of the proposed regulation as '… to the extent…..has not hedged the foreign exchange exposure….' instead of '…is not able to hedge'.

35.2 On the other hand beneficiaries like TNEB, JVVNL, and AVVNL have suggested that FERV or the cost of hedging is to be allowed to the extent of actual foreign currency loans only. TNEB also suggested that, in line with Tariff Policy, FERV should not be allowed. KSEB apprehended that hedging of foreign loan may not be advantageous to the beneficiaries. CESC proposed that decision to go for hedging or not should be left to the utilities; as hedging may not always be beneficial and depends upon the market vagaries. Reliance energy

> has suggested that the Commission should specify the circumstances under which FERV would not be attributable to the utilities.
>
> 35.3 The Commission has decided that the provisions on FERV as given in the draft regulations do not call for any revision or modification."

10. From the foregoing discussion, it emerges that the tariff regulations relevant for the period 2004-09 permitted the generating company or transmission licensee to recover the FERV on year to year basis as income or expense in the period it arose on account of interest payment and loan repayment corresponding to normative foreign debt or actual foreign debt as the case may be. Liabilities arising out of FERV were allowed to be settled directly between the generating company/transmission licensee and the beneficiaries. The Tariff Policy notified by the Central Government on 5.1.2006 enjoined upon the Regulatory Commissions not to allow the risk of foreign exchange variation as a pass through. On the other hand, Tariff Policy only allowed the costs of hedging and swapping to take care of foreign exchange variations for debts secured in foreign currencies.

11. The Commission was conscious of the fact that international money market offered a range of products and derivatives for hedging and swapping of foreign currency exposures. In line with the Tariff Policy, the Commission decided to encourage the generating companies

and transmission licensees to use their expertise to make use of the financial products available and to hedge their foreign currency exposures to the extent feasible. However, the Commission was also equally conscious of the limitations on foreign currency exposures in certain cases and allowed the foreign exchange rate variation as pass through after taking into consideration the following factors as mentioned at para 10 of the Explanatory Memorandum:

a) Small generating companies and transmission licensees may not have the expertise or capability to take appropriate foreign exchange hedging instruments;
b) The generating companies and transmission licensees may not obtain forward cover for the entire foreign exposure in one instance and may obtain in phased manner depending on cost of hedging, prevailing market conditions etc;
c) As a general practice, companies do not go for hedging of the entire amount of foreign exposures for various reasons such as perception regarding variation in a particular foreign currency due to political and economic situation and hedging of each of the foreign currencies in a mixed basket may not be beneficial;
d) In case of some foreign currencies, hedging may not be available;

e) Perception that 100% hedging may not be the main optimal forex risk policy and may not reflect the least cost option for customers

12. Keeping in view the above factors, discretion has been allowed to the generating companies and transmission licensees to hedge either in full or in part the foreign exchange exposure in respect of the interest on foreign currency loan and repayment of foreign loan acquired for the generating station or transmission system. The generating companies and transmission licensees are allowed to recover the cost of hedging corresponding to the normative foreign debt on year to year basis as expense and extra rupee liability corresponding to such foreign exchange is not allowed against the hedged foreign debt. To the extent the generating companies and transmission licensees have not hedged the foreign exchange exposure in their best judgements, extra rupee liability arising out of such foreign exchange rate variation has been allowed as a pass through provided that such non-exposure is attributable to the generating company or the transmission licensee or its supplier or contractors. The Commission considered the objections/suggestions received from the stakeholders and decided that the provision relating to foreign exchange rate variation in the draft regulation needs no modification. The Commission is of the view that the generating

company or transmission licensees are not having any control on the fluctuations in foreign exchange rates; however they can minimize foreign exchange risk with the various tools of hedging available in the market at a cost. Therefore, while finalizing the 2009 regulations, the Commission allowed the Generating Companies and the transmission licensees to recover the cost of hedging and foreign exchange rate variation from the beneficiaries as the generating companies or the transmission licensees are better placed as compared to individual beneficiaries to hedge the exposure in a systematic manner.

13. Against the above background, we proceed to deal with the issues raised by the petitioner in the succeeding paragraphs.

Issue No. 1: Disharmonies between Regulation 40(1) and Regulation 40 (3) of 2009 regulations

14. The petitioner has submitted that though Regulation 40(1) of 2009 regulations read with the Explanatory Memorandum provide full discretion to the generating company for hedging the exposure to foreign exchange variations, Regulation 40(3) provides that recovery of liability on account of FERV shall be permissible only to the extent the generating company "is not able to hedge foreign exchange exposure". The petitioner has submitted that in principle, in normal market conditions,

hedging is always available at a price. Therefore, the use of the words "not able to" in Regulation 40(3) do not seem to be in consonance with Regulation 40(1) and the Explanatory Memorandum. The petitioner has sought clarification that the discretion given under Regulation 40(1) is not intended to be curbed by Regulation 40(3) of 2009 regulations.

15. UPPCL has submitted that a clarification from the Commission in this regard would be helpful in putting any doubt in the matter to rest. GUVNL in its written reply has submitted that no discretion should be allowed to the generating company or transmission licensee for availing hedging. Hedging should be made mandatory in case the rate of interest of foreign loan plus hedging cost is lower than the normal interest rate prevailing for Indian rupee loans in the interest of beneficiaries. GUVNL has further submitted that if hedging is possible within the overall cost of normal market rate of interest, there should not be any discretion to the generating company except in a situation where hedging option is not available for that currency. The learned counsel for BSEB submitted that there is no ambiguity in the provisions of Regulations 40(1) and Regulation 40(3). Learned counsel further submitted that the discretion allowed by the Commission in Regulation 40(1) of 2009 regulations needs to be exercised in a reasonable manner and the onus rests with the

petitioner to prove that hedging was reasonable. The learned counsel also submitted that it has been reiterated by the Supreme Court in a number of cases that discretionary powers conferred on governmental/quasi-governmental authorities must be backed by policy guidelines and procedural safeguards.

16. In response to the submissions of the beneficiaries, the petitioner has submitted that the discretion provided for hedging under the Regulation 40(1) of 2009 regulations would be exercised in a reasonable manner by the petitioner. However, exercise of such discretion should not be judged solely by on the outcome, as the objective of hedging is to reduce risk/uncertainty. As regards GUVNL's suggestion that hedging should be made mandatory in case the rate of interest of foreign loan plus hedging cost is lower than the normal interest rate for Indian rupee loan, the petitioner has submitted that this approach may not be beneficial at all times. The petitioner has clarified that when foreign exchange rate is expected to remain stable or Rupee is likely to appreciate, hedging may not be the best option. The petitioner has also submitted that it is in the process of formulating a policy on exchange risk management which would provide broad guidelines for hedging of foreign exchange risk. The petitioner in its reply dated 8.11.2010 has submitted that the hedging

policy of the petitioner is in a draft stage and the clarifications sought in this petition shall guide the petitioner in formulating an appropriate hedging policy which would be submitted for approval by the Board of Directors of the Company. The petitioner also submitted that consultation with the beneficiaries before hedging would not be practically possible as hedging transactions would have to be concluded in real time through oral communication.

17. We have considered the rival submission on the issue. The grievance of the petitioner is that there is disharmony between clauses (1) and (3) of Regulation 40 of 2009 regulations. The said clauses are extracted hereunder:

> "(1) The generating company or the transmission licensee, as the case may be, may hedge foreign exchange exposure in respect of the interest on foreign currency loan and repayment of foreign loan acquired for the generating station or the transmission system, in part or full in the discretion of the generating company, or the transmission licensee.
>
> (2)...
>
> (3) To the extent the generating company or the transmission licensee is not able to hedge the foreign exchange exposure, the extra rupee liability towards interest payment and loan repayment corresponding to the normative foreign currency loan in the relevant year shall be admissible provided it is not attributable to the generating company or the transmission licensee or its suppliers or contractors.
> (4)..."

18. It is pertinent to mention that at the stage of framing the regulations, the petitioner in its comments had submitted that in clause (3), in place of the words 'is not able to hedge', the words 'has not hedged' should be used. The Commission however decided to retain the words 'is not able to hedge' in the final regulations. Except for stating that the use of the words 'not able to' in Regulation 40(3) is not in consonance with Regulation 40(1) of 2009 regulations, the petitioner has not explained how the existing provisions of Regulation 40(3) fetters the petitioner in exercise of its discretion. It needs to be noted that the Tariff policy allows reimbursement of the cost of hedging to take care of the foreign exchange variation while prohibiting the foreign exchange variation as a pass through. Therefore, as per the tariff policy, it is in the interest of the generating company or transmission licensee to resort to appropriate hedging to reduce the impact of foreign exchange rate variation failing which they are required to bear the entire impact of foreign exchange rate variation. Keeping in view the realities as explained in para 10.3 of the Explanatory Memorandum, the Commission has allowed two things; firstly, hedging has been allowed in part as it may not be practicable nor beneficial to go for full hedging in all cases, and secondly, the impact of foreign exchange rate variation has been allowed as a pass through to a limited extent where the generating company or

transmission licensee has made efforts but not succeeded or has taken a commercial decision not to opt for hedging. Therefore, the Commission has used the words ‘is not able to hedge’ consciously. If the suggestion of the petitioner is agreed and the words ‘has not hedged’ is read into the regulation, it will incentivise the generating company or transmission licensee not to make efforts for hedging and ask for the foreign exchange rate variation as a pass through. In other words, it will bring in the provisions relating to foreign exchange rate variation in the 2004 tariff regulations through the back door and thereby will render the mandate of the Tariff Policy otiose.

19. One of the situations where the generating company or transmission licensee may not be able to hedge can be explained. Regulation 40(2) of 2009 regulations stipulates that the generating company or transmission licensee shall recover the cost of hedging of foreign exchange rate variation corresponding to normative foreign debt. Therefore, recovery of the cost of hedging may get increased/decreased in proportion to the balances of normative debt outstanding. Further, Regulation 16(3) of 2009 regulations provides that the repayment of loan for the year of the tariff period 2009-14 shall be deemed to be equal to the depreciation allowed for that year. Hence there may arise a situation, where

normative loan balances are still appearing in tariff although the amount of actual foreign loan has been fully repaid in the books. In that event, the generating company or transmission licensee **will not be able to** hedge the foreign exchange exposure. Apart from this instance, there are other situations as explained in para 10.3 of Explanatory Memorandum which may not permit hedging of foreign exchange rate variation as a viable option.

20. We are of the view that the language of Regulation 40(3) is clear and unambiguous and complements the provisions of Regulation 40(1) of 2009 regulations. While Regulation 40(1) enjoins upon the generating company and transmission licensee to hedge foreign exchange rate exposure in respect of the interest on foreign currency loan and repayment of foreign loan, Regulation 40(3) permits foreign exchange rate variation as a pass through where the generating company or transmission licensee has not been able to hedge the foreign exchange rate exposure. Inability to hedge shall depend on several factors including the decision of the generating company or transmission licensee not to hedge the foreign currency exposure for a variety of reasons like feasibility, optimal forex risk policy, full hedge cost being exorbitant, standard hedge instrument does not cover full exposure amount, impact

on account of knock in/knock out limits etc. Since the beneficiaries will ultimately bear the burden of foreign exchange rate variation, such decisions should be informed decisions and can be reasonably assumed to be in the interest of the consumers. The beneficiaries shall reimburse the FERV on the basis of furnishing certificates by the petitioner indicating the reasons for its inability or for its decision for not hedging the foreign exchange exposure in respect of payment of interest or repayment of loans. In case of any objections by the beneficiaries to the amount claimed on account of cost of hedging or foreign exchange rate variation, proviso to Regulation 41 enables the generating companies and transmission licensees to approach the Commission for a decision.

21. It is observed that NTPC is raising foreign currency borrowings for its capital expenditure on new capacity addition or renovation and modernisation of existing stations. Where the petitioner has not raised the debt for any specific project and has borrowed at corporate level, such debt is allocated to the projects in a justified manner as per the needs. Audited accounts of the petitioner company for the year 2009-10 reveal that the company has foreign currency exposure in borrowings worth of ₹ 10354 crore, though the foreign currency exposure has not yet been hedged. The petitioner is on record that it is in the process of formulating

its Hedging Policy. We expect the petitioner to finalise at the earliest its Hedging Policy as deemed fit and appropriate commensurate to its exposure to foreign exchange rate variation and keeping in view the clarification given in this order .

22. A point has been made that the beneficiaries need to be consulted prior to entering into any hedging transactions. In our view, this is not a viable solution as the financial markets are characterised by a very high degree of volatility and hedging decisions are extremely time sensitive. However, we direct the petitioner to communicate to the beneficiaries concerned about the hedging decision within 30 days of entering into hedging transaction.

Issue No. 2: Problems arising due to difference between Normative and Actual Loan

23. The petitioner has submitted that as per the RBI guidelines, a company can enter into a hedge transaction only if it has an actual asset/liability/cash flow. Thus hedging of foreign currency loans can be done only when there is actual loan outstanding and for a tenure not exceeding the loan maturity. The petitioner has further submitted that the difference between the outstanding loan and normative loan would remain because the former is subject to contractual repayments while the

latter depends on the normative debt considered in tariff. Hedging of normative loan is, therefore, not feasible if there is no actual loan or to the extent the normative loan is in excess of actual loan outstanding.

24. The petitioner has submitted that in case of most of its generating stations, the total debts consist of both rupee and foreign currency debts with varying maturities. For the purpose of computation of normative repayment, the petitioner has proposed that depreciation recovered through tariff in a year be apportioned first towards the actual repayment due on the Forex loan during the year and the balance towards the rupee loan. The petitioner has submitted that the proposed method would ensure that when there is no actual foreign currency outstanding, the impact of exchange rate variation is not passed on to the beneficiaries. The petitioner has further submitted that if on the other hand, the depreciation considered as normative repayment is apportioned proportionately to rupee and forex loan, then there will be greater anomaly and the gap between the actual and normative loans could be both ways.

25. UPPCL in its reply has submitted that though the proposed method is easy in operation, it would not be economically beneficial to the beneficiaries as the foreign currency loans carry lesser rate of interest than rupee denominated loans. GUVNL has submitted that apportionment

of depreciation recovery should be proportionate to the rupee loans and forex loans. GUVNL has further submitted that the petitioner can avail hedging of the actual foreign loan outstanding, but in case the normative foreign loan outstanding is lower than actual foreign loan outstanding, then the cost of hedging to be recovered from the beneficiaries has to be to the extent of normative loan and the balance cost has to be borne by the petitioner. In case there is no actual foreign loan outstanding, the question of hedging will not arise and the petitioner should not be allowed to recover any FERV from the beneficiaries. **In such a situation, normative foreign currency loan should be considered as converted into rupee loan taking the exchange rate on the date on which final repayment of such foreign currency loan was made.** GUVNL has submitted that in case there is no actual foreign loan outstanding, there should not be any extra rupee liability burden on the beneficiaries on account of normative loan repayment and interest payment. The learned counsel for BSEB has submitted that in case of hedging where actual loan is higher than normative loan, the petitioner should bear the hedging costs of the balance foreign loan. In case actual loan is less than the normative loan, then hedging cost should be on actual foreign loan and there would be no issue if actual loan is equal to normative loan.

26. The petitioner in its rejoinder has submitted that the proposed methodology for apportionment of normative repayment of loan towards the foreign loan repayment and domestic loan repayment for the purpose of FERV calculation has no implication on the calculation of interest on loan component of tariff as presumed by UPPCL. The petitioner has further submitted that calculation of interest on loan is governed by Regulation 16 of 2009 regulations. In its rejoinder to the submission of GUVNL, the petitioner has submitted that in case the methodology suggested by the petitioner is followed for apportionment of repayment between foreign and domestic loans, it is likely that when there is no actual foreign currency loan outstanding, no impact of exchange rate variation would be passed on to the beneficiaries In the apportionment methodology suggested by GUVNL, gaps between actual and normative loans would remain both ways.

27. We have considered the issue raised by the petitioner and the rival contentions on this point. We are of the view that the methodology proposed by the petitioner has its own limitation. Though the proposed methodology may reduce the difference between the actual and normative foreign loans, it would not eliminate the difference in cases where depreciation is less than the repayment liability of a foreign currency loan in a particular year. Moreover, the apportionment of depreciation on

proportionate basis is also not appropriate especially where normative loan is greater than the actual loan i.e. it will result in an anomaly where FERV is recoverable/payable on a liability that does not exist. Similarly where there is no actual repayment of foreign loan in a particular year, it would still result in apportioning normative repayment to foreign debt and consequently, notional exchange rate variation would be recoverable/payable.

28. Regulation 40 (2) of 2009 regulations provides as under:

> "(2) Every generating company and transmission licensee shall recover the cost of hedging of foreign exchange rate variation corresponding to the normative foreign debt, in the relevant year on year-to-year basis as expense in the period in which it arises and extra rupee liability corresponding to such foreign exchange rate variation shall not be allowed against the hedged foreign debt"

29. Where foreign currency loans have been raised for specific projects, specific loans are identifiable with those projects. However where the generating company borrows in foreign currency for more than one generating station, such loan is further allocated to different stations/different assets. In either case, the foreign currency loans are considered for tariff within the overall normative debt equity ratio of 70:30 or 50:50 or a mix with subsequent additional capital expenditure being allowed in the ratio of 70:30 with original funding in 50:50 ratio. The normative foreign currency debt in Regulation 40 (2) as extracted

above refers to the foreign currency loan for a particular station considered for tariff determination within the total financing package. The cost of hedging/the extra rupee liability towards interest payment and loan repayment to the extent the generating company has not taken a hedge is allowed to the extent it is within the normative debt as approved by the Commission.

30. It needs to be emphasised that where there is no actual foreign loan outstanding, no cost of hedging or exchange rate variation on loan repayment or interest payment will be recovered even though the normative debt is outstanding. It is also noted that NTPC in its debt portfolio has borrowed against Bonds where there is bullet repayment or where repayment starts after a moratorium of few years. In such cases, the exchange rate variation on repayment will be due corresponding to the schedule of actual repayment.

31. The provision for allowing FERV/cost of hedging in the 2009 regulations is for passing on the cost/risk mitigating cost to the beneficiaries and not for the purpose of allowing notional exchange rate variation/cost. Recovery of foreign exchange rate variation/cost of hedging which is more than actual will defeat the intents of the regulations. The cash outflow for meeting the actual debt repayment and

as allowed in tariff would in the long run be almost the same as far as loans in Indian Rupees is concerned since there would only be timing difference. As far as the loan in foreign currency is concerned, if a notional element is introduced, there would be permanent difference because of exchange rate variation and actual terms of the loan. This could result in non recovery/ higher /lower recovery of exchange rate variation which is not the intent of the regulations. It may also be noted that the loans in foreign currency carry a much lower rate of interest and the benefit of lower rate of interest gets passed on to the beneficiaries while computing the interest on loan in tariff through weighted average rate of interest, after treating depreciation as repayment irrespective of the actual repayment schedule. Since, the exchange rate variation arises on actual repayment and the same is to be recovered corresponding to normative debt of 50% or 70% or mix, as the case maybe, in the year it is incurred,the recovery of FERV and Cost of Hedging as an expense in the year it is incurred shall be borne by the beneficiaries upto the normative debt considered for tariff determination within the toal package.

Issue No.3 :Cost Recovery Issues:

(A) Extent of recovery of hedging cost related to loan outstanding or repayment and interest payment:

32. The petitioner has sought clarification whether the cost of hedging is recoverable corresponding to the normative loan balance outstanding from year to year or whether the generating company is permitted to recover the cost of hedging only corresponding to the repayments and interest payments due in a year.

33. UPPCL has submitted that the recovery of cost of hedging the normative loan balance outstanding from year to year as sought by the petitioner may not be prudent as the beneficiary would be thrust with hedging cost for higher amount even though the foreign exchange risk faced by the generating company is for significantly lower amount. UPPCL has submitted that only the cost of hedging corresponding to the repayments and interest payments due in a year may be allowed to be recovered from the beneficiaries. Alternatively, the generating company may hedge the complete loan outstanding in a single year but the beneficiaries may bear the burden of hedging costs only on accrual basis corresponding to cash outflows pertaining to repayments and interest payments due in the relevant year. GUVNL has submitted that the recovery shall be in accordance with Regulation 40(2) of 2009 regulations. The learned counsel for BSEB submitted that cost of hedging corresponding to normative debt in the relevant year, on year to year basis should only be recovered from the beneficiaries.

34. The petitioner in its rejoinder has submitted that UPPCL's contention limits the available options and is contrary to Regulation 40(2) of 2009 regulations which allows recovery of cost of hedging of foreign exchange variation in the relevant year as an expense in which it occurs. The petitioner should be reimbursed actual cash outflows due to hedging as and when such outflows are incurred, subject to normative loan limits. In response to the reply of GUVNL, the petitioner has submitted that in case of a hedge, expenses incurred can be on account of the repayments and interest payments made during the year as well as on the outstanding balance of the loan. It is against this background, the petitioner has sought a clarification regarding the amounts which will be reimbursable from the beneficiaries so that hedging policy can be made and hedging can be taken up accordingly.

35. Regulation 40(2) of 2009 regulations authorizes the generating company and transmission licensee to recover the cost of hedging of foreign exchange rate variation corresponding to the normative foreign debt, in the relevant year on year to year basis as expense in the period in which it arises. The Commission is of the view that the risk of exchange rate variation exists for the entire outstanding amount of the loan including the amount due for repayment in a given year. Restricting the

recovery of hedge cost only to the repayments due in a year would limit the hedging options available to the generating company or transmission licensee and this may not be beneficial. In our view, the choice of hedging only the repayments due in a year or the total outstanding balances should be left to the judgment of the generating company or transmission licensee and the cost of hedging actually incurred in any year shall be recoverable from the beneficiaries corresponding to normative foreign debt outstanding. Hedging shall be done as per the approved hedging policy of the generating company or transmission licensee and the hedging decision should be communicated to all the beneficiaries concerned within 30 days of entering into hedging agreements.

(B)Recovery of Upfront premium

36. The petitioner has submitted that if options are used as a hedging instrument, the petitioner will be required to pay upfront premium. The petitioner has sought a clarification as whether the cost for upfront premium should be recovered as and when incurred by the petitioner.

37. UPPCL has submitted that upfront premium amount be spread over the options period and proportionate amount may be claimed from the

beneficiaries in the period the cash outflow occurs in conformity with Regulation 40(3) of 2009 regulations. GUVNL has submitted that the petitioner should account the cost of hedging including upfront premium as expense and recover the same in accordance with Regulation 41 of 2009 regulations.

38. The petitioner in its rejoinder has opposed the contention of UPPCL and has submitted that the generating company should be reimbursed the cash outflows due to upfront premium as and when such cash outflows occur without which it may not be possible to use option products at all.

39. The Commission is of the view that Upfront Premium incurred for options shall be recovered from the beneficiaries corresponding to the normative foreign debt as discussed under Issue No.2 and generating company or transmission licensee shall be entitled to recover the same on year to year basis in the year of payment. This is also in conformity with Regulation 3(2) of 2009 regulations. However, where the option is not utilized due to favourable market conditions, the strike price will become the basis for all calculations.

(C) Recovery of difference between hedge rate and exchange rate as on 31st March, 2004 or date of commercial operation, as the case may be:

40. The petitioner has submitted that if any hedge transaction is undertaken by the company, the applicable rate of exchange (hedge rate) would be with reference to the spot rate current at the time of the hedge. Such rate would be different from the exchange rate applicable on the date of commercial operation or 31st March, 2004, as the case maybe. The petitioner has sought a clarification as to whether the difference between the exchange rate as on the date of commercial operation or as on 31st March, 2004, as the case may be, and the hedge rate should be recoverable from/payable to the beneficiaries in the proportion to the normative loan repayment.

41. UPPCL has submitted that Regulation 7(1) of 2009 regulations allows any gain or loss on account of foreign exchange risk variations during construction on loan and as such the variation gets automatically capitalised on the date of commercial operation. UPPCL has submitted that any hedging transaction undertaken prior to the date of commissioning and which operates post commissioning period as well must be treated at par with other hedges wherein the cost of hedging is passed on the beneficiaries proportionate to the cash outflows. GUVNL has submitted that it is not clear as to why the petitioner is seeking clarification with respect to 31.3.2004 or the date of commercial

operation since the liability towards FERV upto 31.3.2009 has already been allowed either as additional capitalisation or has been recovered as expense. GUVNL has further submitted that difference between hedge rate and the exchange rate at which the foreign loan is outstanding in the books of account has to be recovered/payable in proportion of the normative outstanding loan.

42. The petitioner in its rejoinder has explained that in case of station whose date of commercial operation is after 31.3.2004, FERV upto the date of commercial operation gets capitalised and FERV on yearly repayment and interest payment is recoverable after the date of commercial operation with respect to the base exchange rate as on the date of commercial operation. Countering the contention of UPPCL, the petitioner has submitted that provisions for hedging the foreign exchange risk in respect of interest and repayment of foreign currency loans are applicable only after the date of commercial operation of the station.

43. The Commission is of the view that the difference between the hedge rate and exchange rate as on 31.3.2004/date of commercial operation of the generating station or transmission system is recoverable from the beneficiaries. Even at present, the recovery of FERV on year to

year basis is with above reference rate. The recovery would also be on the basis of normative loans as discussed under Issue No.2.

(D) Recovery of hedging cost and FERV in case of cross currency swap:

44. The petitioner has submitted that in case of non-USD currencies such as Japanese Yen, Euro etc., trading is through the USD for INR. In other words, any exposure to such non-USD currencies has two legs viz. a non-USD to USD leg and a USD to INR leg. Therefore, for such non-USD loans, discretion should be available for hedging either of the legs or both legs simultaneously. For example, a loan in Japanese Yen may be swapped into USD which is a relatively less volatile currency. In such case the generating company has to incur hedge cost for swapping the loan from JPY to USD and exchange rate variation on the USD-INR exposure. In such an event, the petitioner should be permitted to recover from the beneficiaries the hedge cost for the JPY-USD leg and the foreign exchange rate variation for the USD-INR leg.

45. UPPCL has objected to the proposed mechanism of multiple swap as it would thrust additional hedging costs on the beneficiaries and has requested to allow one swap. GUVNL has submitted that in case none of the financial institutions are providing direct hedging of particular

currency, then cost of hedging of both the legs can be recovered by the petitioner limited to normative debt.

46. The petitioner in its rejoinder has explained that it may not be possible to hedge in one step the loans in non-USD currencies to INR because of the absence of an active market for such hedges. If available, a very limited number of banks offer such hedging and they may be expensive and uneconomical due to limited availability.

47. The Commission is of the view that Hedging Cost incurred as well as FERV can be allowed for the loan repayments and interest payments corresponding to normative debt as discussed under issue No. 2.

(E) Recovery of hedging cost in case of swap of foreign floating rate loan with Indian fixed rate loan.

48. The petitioner has submitted that the foreign currency loans can be swapped into rupee loans through cross currency swaps. In the case of foreign currency loans with floating interest rates, the entire loan can be converted into fixed interest rate rupee loan through a swap. This would hedge the borrower against both interest rate risk as well as foreign exchange risk. The petitioner has sought a clarification as to whether in such cases interest cost of the swapped rupee loan will be recoverable

from the beneficiaries instead of the interest on the foreign currency loan included in the annual capacity charges.

49. UPPCL has submitted that Regulation 16(7) of 2009 regulations makes it amply clear that costs associated with the swapping of loans would be borne by the beneficiaries only if it results in net savings to them. The beneficiaries would bear the interest cost of the swapped loans if it does not lead to any increase in the overall burden of interest payment due to such swapping. UPPCL has submitted that any incremental burden of interest payment due to swapping of loan may be borne only by the generating company or transmission licensee and may not be borne by the beneficiaries. GUVNL has submitted that in case the swapping of foreign floating rate loan with Indian fixed rate loan is availed by the petitioner, cost of such hedging limited to normative loan can be recovered from the beneficiaries provided that the interest under tariff shall be then in accordance with such Indian fixed rate loan.

50. The petitioner in its rejoinder has submitted that provisions of Regulation 16(7) of 2009 regulations regarding refinancing of loan is not relevant in this case as swap is not the same as refinancing. Swap is a hedge mechanism under which the existing loan is not repaid or replaced.

Instead through a separate arrangement, the borrower is able to swap the cash outflow in the loan currency (say USD) into another currency (say INR) at an agreed exchange rate and interest rate.

51. The Commission is of the view that the total hedging cost incurred for swapping of foreign floating rate loan with Indian fixed rate loan can be allowed. Interest payable by the generating company for Indian fixed rate will be chargeable from the beneficiaries as discussed at issue No.2.

Issue No. 4: Hedging of Interest Rate Risk

52. The Petitioner has submitted that it is not clear from 2009 regulations whether a company is permitted to swap foreign currency loans availed on floating interest rate to fixed interest rate basis to hedge against Interest Rate Risk. The petitioner has submitted that the generating company should be given discretion to hedge floating interest rate on foreign currency loans with fixed interest rates, with the hedging cost being recoverable from the beneficiaries.

53. UPPCL has submitted that in case the generating company or transmission licensee opts to swap foreign floating interest rate loan with foreign fixed interest rate loan to mitigate interest rate risks then hedging cost may be allowed to be recovered from the beneficiaries only if such

hedging results in net savings to the beneficiaries. GUVNL has submitted that the petitioner needs to be ultra cautious in swapping floating interest rate loans with fixed interest rate loans and the same may be resorted to after due diligence that the interest rate of that particular currency has strong tendency to increase.

54. The petitioner in its rejoinder has submitted that interest rate risk is different from the exchange risk. Interest rate hedges can protect against increase in interest rates and this would reduce variations in tariffs due to changes in the interest rate of floating rate loans. The petitioner has further submitted that the discretion exercised by the petitioner should not be subject to scrutiny post facto by the beneficiaries as it is possible that the hedge may result in a notional loss due to different movement in the interest rates/exchange rates than that was envisaged at the time of hedging.

55. The Commission is of the view that the generating company or transmission licensee can hedge floating interest rate on foreign currency loans with fixed interest rates. Such swapping is allowed as it fixes the interest rate over the tenure of the loan and thereby reduces the risk of fluctuation and volatility.

56. The petitioner is directed to finalise its Hedging Policy after taking into consideration the clarifications given hereinabove to the issues raised by the petitioner. The petitioner shall submit a copy of its Hedging Policy duly approved by its Board of Directors to the Commission with copies to the beneficiaries. .

57. The petition is disposed of in terms of the above.

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(M. DEENA DAYALAN)	**(V.S.VERMA)**	**(S.JAYARAMAN)**	**(DR.PRAMOD DEO)**
MEMBER	**MEMBER**	**MEMBER**	**CHAIRPERSON**