

**CENTRAL ELECTRICITY REGULATORY COMMISSION  
NEW DELHI**

**Coram:**

1. **Shri Ashok Basu, Chairman**
2. **Shri G.S. Rajamani, Member**
3. **Shri K.N. Sinha, Member**

**Review Petition No. 5/2003  
In  
Petition No. 61/2001**

**In the matter of**

Review of order dated 1.11.2002 in Petition No.61/2001 - Generation tariff for Uri Hydroelectric Project for the period from 1.4.2001 to 31.3.2004.

**And in the matter of**

National Hydroelectric Power Corporation Ltd.                      ...                      **Petitioner**

Vs

- |   |                        |
|---|------------------------|
| 1. Punjab State Electricity Board, Patiala<br>2. Haryana Vidyut Prasaran Nigam Ltd., Panchkula<br>3. Delhi Vidyut Board, Delhi<br>4. Uttar Pradesh Power Corporation Ltd., Lucknow<br>5. Uttaranchal Power Corporation, Dehradun<br>6. Rajasthan Rajya Vidyut Prasaran Nigam Ltd., Jaipur<br>7. Himachal Pradesh State Electricity Board, Shimla<br>8. Power Development Deptt., Jammu (J&K)<br>9. Engineering Deptt., Chandigarh | ... <b>Respondents</b> |
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**The following were present:**

1. Shri H.D. Khunteta, ED (F&A), NHPC
2. Shri R.K. Sharma, Dir (Tech.), NHPC
3. Shri Sachin Datta, Advocate, NHPC
4. Shri S.K. Agarwal, GM (Comml.), NHPC
5. Shri D.S. Ahluwalia, Sr. Manager (F&A), NHPC
6. Shri Rupesh Sood, DM(F&A), NHPC
7. Shri T.K. Mohanty, SM (Law), NHPC
8. Shri Ashok Chopra, NHPC
9. Shri Rupesh Sood, DM (F&A), NHPC
10. Er. P. Kumar, NHPC

11. Shri S.K. Meena, NHPC
12. Shri D.S. Ahluwalia, SM (F&A), NHPC
13. Shri V.K. Kanjlia, NHPC
14. Shri R.K. Arora, XEN (T), HVPNL
15. Shri G.M Agrawal, Dy. CE (CommI), RVPN
16. Shri K.K. Mittal, XEN (ISP), RVPN
17. Shri D. Chandra, XEN, NREB
18. Shri Amarjeet Singh, S.E., NREB
19. Shri T.P.S. Bawa, S.E., PSEB
20. Shri S.R. Narasimhan, NRLDC
21. Shri H.C. Verma, EE, UPPCL
22. Shri S.P. Srivasta, Sr. AE, UPPCL

**ORDER**  
**(DATE OF HEARING 6.3.2003)**

The application for review has been filed by National Hydroelectric Power Corporation Ltd. (in short, NHPC) with a prayer for modification of the order dated 1.11.2002 in Petition No.61/2001, (hereinafter referred to as “the order under review”), to the extent of alleged errors and on the grounds mentioned in the application, with further prayers to modify and allow the annual fixed charges for the power sold from Uri Hydro Electric Project (in short, Uri HEP) for the period from 2001-02 to 2003-04 as per paragraph (J) of the application and additional fixed charges for the years 2001-02, 2002-03 and 2003-04 on account of additional interest liability on the funds to be raised during the tariff period for repayment of loan. NHPC has also prayed for prescribing the methodology for calculation of incentive/disincentive and Capacity Index for the period prior to implementation of ABT in Northern Region.

2. Prior to enactment of Electricity Regulatory Commissions Act, 1998, the terms, conditions and tariff for sale of electricity by a generating company wholly or partly owned by the Central Government was determined by the Central Government by virtue

of powers under Section 43A (2) of the Electricity (Supply) Act, 1948. In exercise of these powers, the Central Government in Ministry of Power had notified on 14.5.1999 tariff for the period from 1.4.1998 to 31.3.2002 for electricity sold from Uri HEP. However, after the enactment of Electricity Regulatory Commissions Act, 1998 and establishment of the Commission, these powers came to be vested in the Commission. The Commission notified the terms and conditions of tariff, which came into effect on 1.4.2001. Therefore, NHPC filed an application (Petition No 61/2001) for approval of tariff for the period from 1.4.2001 to 31.3.2004 based on terms and conditions of tariff notified by the Commission. The application was disposed of vide the order under review.

3. The Commission in the order under review had approved tariff, which included annual fixed charges as well as the energy charges for the power sold from Uri HEP to the respondents, based on the norms contained in the Commission's notification dated 26.3.2001. The prayer for review is confined to the annual fixed charges only.

4. The replies to the application for review have been filed on behalf of respondent No.4, Uttar Pradesh Power Corporation Ltd (UPPCL) and respondent No 6, Rajasthan Rajya Vidyut Prasaran Nigam Ltd (RRVPL). . The contentions raised on behalf of RRVPL and UPPCL, which are on merits of the claims of NHPC and not on maintainability of review, can be considered at the time of re-hearing of the matter.

5. The issues raised in the application for review are discussed in the succeeding paragraphs.

**Adjustment of amount of Exchange Rate Variation**

6. The Commission's notification dated 26.3.2001 on terms and conditions of tariff lays down that extra rupee liability towards interest payment and loan repayment incurred in the relevant year and arising out of foreign exchange rate variation shall be admissible. The notification further enjoins upon the utilities to follow the method as per the Accounting Standard – 11 (AS-11) issued by the Institute of Chartered Accountants of India to calculate the impact of exchange rate variation.

7. NHPC in its original petition for approval of tariff for the period 1.4.2001 to 31.3.2004 had calculated the impact of exchange rate variation at the end of each year, based on details audited and certified by the statutory auditors since, according to NHPC, it had been following the method prescribed under AS-11, as mandated by the Commission's notification. Accordingly, NHPC had claimed additional capitalisation of Rs.110.83 crores on account of FERV during the period from 1998-99 to 2000-01. The Commission in its order under review did not allow capitalization of FERV claimed on the ground that FERV had already been allowed to be reimbursed on actual basis by the Central Government/ Commission, from the date of commercial operation of the project and up to 2000-2001.

8. NHPC has now submitted that the Central Government/ Commission had allowed FERV for the years 1997-98 to 2000-2001 on the amount of repayment of

foreign loan made during the year. FERV so calculated from the date of commercial operation to the date of repayment of installment and that FERV allowed was not as per AS-11. It is submitted that since AS-11 provides for capitalisation of FERV by adjustment of exchange difference arising on carrying amount of assets at the end of each year, FERV capitalized as per AS-11 will have its effect on tariff. NHPC, therefore, seeks review of the decision of capitalization of FERV for tariff computation.

9. RRVPNL in its response has submitted that the effect of FERV on repayment of loans, (including the principal and interest) cannot be a source of income but actual repayments have to be reimbursed by the beneficiaries to NHPC. It is stated that since FERV has already been allowed on the amount of repayment, made during the respective year, there was no justification for review. UPPCL in its reply has taken a similar stand. It has been stated on behalf of UPPCL that since FERV for the years 1997-98 to 2000-2001 has been separately approved by Ministry of Power/Commission and has been allowed on actual payment basis, claim under FERV capitalisation cannot be allowed for tariff purposes. It is further stated that in view of the fact that scope of review under the law is limited, the issue cannot be reopened since NHPC has failed to establish that its case falls under the norms applicable for review of order.

10. We have considered the rival submissions. The Central Government in Ministry of Power had allowed FERV on repayment of loan installment and actual payment of interest for the years 1997-98 and 1998-99 vide notification dated 14.5.1999. FERV for the years 1999-2000 and 2000-2001 also was allowed by the Commission, based on

Petitions (No. 26/2000 and 8/2001) filed by NHPC, on repayment of loan installment and actual payment of interest. The Commission, while determining tariff for the period from 1.4.2001 to 31.3.2004, did not allow capitalisation of FERV for the years 1997-98 to 2000-2001 for the purpose of tariff fixation holding that FERV had been allowed by the Central Government/Commission on repayment of loan installment and actual payment of interest as per the notification prevailing during that period. The Commission while allowing tariff in its order under review had not considered the impact of FERV on capital cost as per AS-11, though the Commission's notification dated 26.3.2001 requires the utilities to maintain accounts as per AS-11. In view of this, we consider it necessary that the issue needs to be deliberated in detail to consider whether or not amount of FERV is required to be capitalized in accordance with AS-11. We, therefore, allow review on the issue of treatment of FERV for the purpose of tariff.

### **Computation of Gross Block**

11. NHPC in the petition for approval of tariff had submitted details of gross block of Rs.3169.91 crore as on 31.3.1998, which was inclusive of FERV of Rs.86.16 crore from the date of commercial operation, that is, 1.6.1997 to 31.3.1998 and sought approval of tariff accordingly. The Commission, however, for the purpose of determination of tariff considered the gross block of Rs.3065.90 crore (inclusive of FERV), as on 31.3.1998, but excluding cost of initial spares of Rs.20.55 crore, as considered by the Central Government in Ministry of Power while notifying tariff for the period from 1.4.1998 vide notification dated 14.5.1999. NHPC had also claimed additional capitalisation of Rs.257.94 crore (which included additional capitalisation of Rs 110.83

crore on account of FERV) during the period from 1.4.1998 to 31.3.2001. Against this, the Commission allowed additional capitalisation of Rs. 143.80 crore only, and rejected the claim of NHPC for additional capitalization on account of FERV (Rs. 110.83 crore) for the reasons explained in para 10. Thus, a gross block of Rs. 3209.70 crore (Rs. 3065.90 + Rs. 143.80 crore), as on 31.3.2001, was considered by the Commission for the purpose of tariff for the period 2001-02 to 2003-04.

12. According to NHPC, the Commission ought to have considered the gross block of Rs.3169.91 crore (inclusive of Rs. 86.16 crore on account of capitalization of FERV up to 31.3.1998) the details of which, duly audited and certified by statutory auditors, were furnished along with the petition. It is further submitted that in order to arrive at gross block, as on 31.3.2001, the Commission ought to have considered the additional capitalization of Rs. 110.83 crore on account of FERV claimed for the period 1.4.1998 to 31.3.2001. It is contended by NHPC that the Commission ought to have considered the gross block of Rs.3424.54 crore, [Rs. 3169.91 crore (gross block as on 31.3.1998) + Rs. 143.80 crore (additional capitalization allowed by the Commission) + Rs. 110.83 crore (on account of FERV)], as on 31.3.2001, for the purpose of tariff fixation. According to NHPC, non-consideration of gross block of Rs.3169.91 crore and additional capitalisation of Rs. 110.83 crore on account of FERV and adoption of gross block considered by the Central Government without proper scrutiny of the material on record are the errors apparent on the face of record and need be corrected through the process of review.

13. The respondents have supported the order of the Commission and have submitted that gross block decided by Ministry of Power for earlier tariff period should not be deviated from. RRVPNL in its reply has submitted that there could be no reason to reopen the issue of gross block since inception of the project, considered by the Central Government in the past. In case the gross block for the prior period is reopened, it would tantamount to re-fixing of tariff for the past period. The Commission has considered the gross block as on 31.03.98 as was considered by Ministry of Power while notifying the tariff and needs no review. It is averred that NHPC could have taken up the issue with Ministry of Power for rectification of mistake at appropriate time when tariff was notified. As regards gross block as on 31.03.2001, RRVPNL has stated that NHPC has to repay for additional capitalization as allowed/ disallowed by the Commission. In this respect, it has been submitted that since the entire data was placed before the Commission and the Commission has passed its order after considering all the details, there is no justification for reviewing the same.

14. We have considered the matter very carefully. The Commission in the order under review had adopted the gross block of Rs.3065.90 crore, excluding the initial spares of Rs.20.55 crore, as on 31.3.1998, from Ministry of Power notification dated 14.5.1999 against the claim of NHPC for gross block of Rs.3169.91 crore. The Commission further allowed gross block of Rs.3209.70 crore, as on 31.3.2001, though NHPC had claimed gross block of Rs. 3424.54 crore. The Commission did not deliberate in detail the claim of NHPC for considering the gross block of Rs 3169.91



crore as on 31.3.1998 and Rs.3424.54 crore, though the claims by NHPC were supported by the auditor's certificate.

15. The Commission in the order under review had noted that Ministry of Power in its notification dated 14.5.1999 considered gross block up to 31.3.1998 after disallowing a sum of Rs. 83.47 crore as undischarged liability and proceeded to consider the gross block on the presumption that Ministry of Power in the said notification dated 14.5.1999 excluded the effect of FERV of Rs. 86.16 crore on capital cost. However, no evidence appears to be on record to support the basis for the presumptions made. This is another ground to justify review of the gross block.

16. The differences between gross block claimed by NHPC and that allowed by the Commission are primarily on account of difference in approach towards capitalization of FERV. We have also held in earlier part of this order that the manner of treatment of FERV for the purpose of tariff also needs to be reviewed.

17. The effect of the above discussion is that the issue of gross block opens up and deserves to be reconsidered. Accordingly, we allow review on the issue of calculation of gross block as on 31.3.1998 and 31.3.2001.

#### **Calculation of amount of loan and interest on loan**

18. The Commission while approving tariff vide the order under review had taken into account the outstanding loan of Rs.1608.49 crore, as on 1.4.2001, after adjustment of

repayments made up to the year 2000-01. The interest on loan was allowed on the outstanding amount of Rs.1608.49 crore, by considering the repayments during the tariff period. According to NHPC, the gross loan as on 1.4.2001 was Rs.2339.13 crore and outstanding loan was Rs.1706.97 crore (Rs. 1608.49 crore + Rs. 98.48 crore), as on 1.4.2001. Here again the basic grievance of NHPC is that notional loan of Rs.98.48 crore, representing 50% of total FERV amount from the date of commercial operation to 31.3.2001 has not been taken into account by the Commission for the purpose of arriving at outstanding loan as on 1.4.2001. On the question of calculation of loan, RRVPNL has submitted that in case there was a factual error in working out the amount of loans, these could be rectified, but in any case loan has to be reduced by the amount of cumulative depreciation received up to 31.3.2001.

19. We have allowed review on the issue of capitalization of FERV as also calculation of gross block as on 31.3.1998 and 31.3.2001. The decision on these issues will automatically reopen the issue of calculation of outstanding loan to be taken, as on 1.4.2001, for the purpose of working out interest on loan. Therefore, the question of calculation of amount of loan as also interest thereon are incidental to the decision on treatment of FERV and consideration of gross block for the purpose of tariff. As a corollary of our decision to review capitalization of FERV and gross block for computation of tariff, we allow review on the issue of calculation of amount of loan, as on 1.4.2001, as also the interest thereon during the tariff period. The contention raised by RRVPNL is on merits of calculation of amount of loan and not on the question of review of the decision on loan as per the order under review.

### **Calculation of Equity and Return on Equity**

20. The Commission in the order under review had considered financing of additional capital expenditure from the loan disbursed during respective years and the balance amount was considered from equity. The return on equity was allowed by considering equity so arrived at. By this methodology, the Commission in its order under review had considered equity of Rs. 996.46 crore as on 1.4.1997 and of Rs. 989.60 crore as on 1.4.2001. NHPC has stated that equity provided by the Central Government till 1.4.1997 was Rs. 976.59 crore and not Rs. 996.46 crore considered in the order under review. It has been further stated that some additional equity had been provided by the Central Government, therefore, additional capitalisation ought to have been considered by the Commission as met out of the additional equity so provided and thereafter from the loan and the balance amount, if any, from the internal resources. It has been averred by NHPC that the Commission had not considered the additional equity provided by the Central Government for financing of additional capitalisation and on the contrary it allowed return on equity for 2001-02, 2002-03 and 2003-04 on the reduced amount of Rs. 989.60 crore, even though no part of equity was surrendered. According to NHPC, the Commission should have considered equity of Rs 1019.67 crore, as on 1.4.1998, as claimed in the original petition; Rs.976.59 crore as contributed by the Central Government up to 1.4.1998 and notional equity of Rs. 43.08 crore consequent to capitalization of FERV for the period up to 31.3.1998. Further, NHPC has stated that equity as on 1.4.2001 should be taken as Rs. 1084.07 crore after accounting for notional equity of Rs. 98.48 crore, representing 50% of FERV sought to be capitalized from the date of commercial operation (1.6.1997) to 31.3.2001 and additional equity

provided by the Central Government. The respondents have not commented on maintainability of review on this account. RRVPNL has stated that if there has been some calculation error, the same could be rectified. However, when the amount of FERV has been paid, there could be no reason to include 50% of FERV as notional equity.

21. We have considered the issue raised on behalf of NHPC. We are satisfied that the issue needs to be reconsidered in the light of discrepancies pointed by NHPC. The issue that also needs to be examined further in detail is whether the part of additional capitalisation could be considered as financed through equity first as contended by NHPC or through loan disbursed during the year, as decided in the order under review or debt-equity ratio for the additional capitalisation needed to be maintained as per the approved financial package. Also, the decision on gross block, to be reviewed in the light of this order, will have its consequence on equity and return thereon. We, therefore, allow review of calculation of equity and return on equity. Whether or not to allow 50% of FERV, as notional equity would be decided after hearing the parties.

### **Depreciation**

22. The Commission, for the purpose of tariff, had considered the weighted average depreciation rate of 2.54% and it allowed depreciation of Rs.81.53 crore to be recovered through tariff each year during 2001-02 to 2003-04. For the purpose of calculation of depreciation, the sum of Rs.20.55 crore, the cost of initial spares was excluded and depreciation was calculated on gross block of Rs.3209.70 crore.

23. It has been pointed out by NHPC that amount of Rs.20.55 crore could not be excluded for the purpose of calculation of depreciation as the initial spares capitalized are recoverable through depreciation only. Therefore, according to NHPC, depreciation ought to have been worked out on the gross block without deducting the amount of initial spares and has sought review of order on this count also. The respondents in their replies have not questioned the maintainability of review on this ground.

24. RRVPNL has submitted that the contention of NHPC does not merit consideration since basically the amount of depreciation is to be utilized for repayment of loans only. However, the principle of depreciation applies to the replacement of any asset, which outlives its useful life. In the case of initial spares, the amount is not to be recovered through depreciation because neither this amount has to be repaid as a loan nor the spares have to be replaced because recurring spares are provided through yearly O&M expenses. RRVPNL has prayed that the request of NHPC needs no consideration. On this issue, the views of UPPCL are similar to RRVPNL.

25. On perusal of the order under review it is revealed that based on the weighted average depreciation rate of 2.54%, the depreciation has been allowed on the gross block of Rs. 3209.70 crore which excludes initial spares of 20.55 crore. The order does not state reasons for exclusion of initial spares for the purpose of recovery of depreciation. Further, review of gross block already ordered by us will also have its

impact on the amount of depreciation to be recovered. Therefore, we allow review on this count also.

### **Advance Against Depreciation**

26. NHPC has also sought review of Advance Against Depreciation amounts allowed in tariff. We have earlier allowed review of gross block as on 31.3.1998 and 31.3.2001, which will have implications on allocation of debt and equity, during the years 1998-979 to 2000-01. The recalculation of debt and interest thereon will have its impact on calculation of Advance Against Depreciation. Therefore, we allow review of amount of Advance Against Depreciation allowed in the order under review as consequential to the decision on debt and equity components of the gross block, as on 31.3.2001.

### **Interest on Working Capital**

27. In accordance with the Commission's notification dated 26.3.2001, interest on working capital covers the following:

- (a) Operation and Maintenance expenses for one month;
- (b) Maintenance spares at actuals but not exceeding one year's requirements less value of one fifth of initial spares already capitalized for the first five years;
- (c) Receivables equivalent to two months of average billing for sale of electricity.

28. The issues on which review has been allowed as per our decision in the preceding paragraphs will necessitate review of interest on working capital as some of the elements form the ingredients for calculation of working capital. Accordingly, the interest on working capital as a component of tariff (fixed charges) will be considered based on decision on the issues on which review has been allowed as per this order. Thus interest on working capital allowed by the Commission in the order under review shall also be subject to reconsideration and accordingly review is allowed on Interest on Working Capital element of the fixed charges.

### **O & M expenses**

29. The Commission in the order under review did not allow additional capitalisation to the extent of Rs.3.31 crore, the details of which along with reasons for disallowing additional capitalization, were duly incorporated in the order. According to NHPC, the Commission has erred in not considering the amount of Rs.3.31 crore as part of O&M expenses during the period 1998-99 to 2000-01, once additional capitalization of this amount had not been allowed. NHPC has sought review of the relevant part of the order. The replies filed by the respondents are silent on the maintainability of review of O&M expenses sought by NHPC. The respondents have though submitted that O&M expenses allowed by the Commission are very high and further review may hike them further.

30. So far as the question of considering the amount of Rs.3.31 crore not allowed to be capitalized is concerned, we are of the opinion that this issue needs further

deliberation and decision by the Commission as to whether or not the amount be considered as a part of actual O & M expenses during the relevant year. Therefore, we allow review of O&M expenses authorized by the Commission in the order under review.

31. The entire Annual Fixed Charges will be required to be recalculated based on the decisions on the issues allowed to be reviewed.

### **Additional Interest liability**

32. In the original tariff petition, NHPC had submitted that it would require to raise additional loans during 2001-02, 2002-03 and 2003-04 since depreciation and Advance Against Depreciation claimed in the tariff petition were insufficient to meet its liability for repayment of loan and interest. NHPC had, therefore, claimed certain amounts in tariff as additional interest liability on the funds to be raised through additional loans. The Commission in the order under review has not adjudicated upon the claim of NHPC. NHPC has prayed for allowing the amounts claimed as additional annual fixed charges on account of additional interest liability on the funds required to be raised to meet the liability of repayment of loan.

33. RRVPNL has submitted that the claim of NHPC is not in accordance with the notification dated 26.03.2001 of the Commission. RRVPNL has also pointed out that some loans have been drawn after the date of commercial operation, the reasons for which are not given.



34. We direct that issue will be considered along with other issues review of which has been allowed through this order.

**Calculation of incentive/disincentive**

35. In addition to Annual Fixed Charges, NHPC is entitled to incentive from the respondents or liable to pay them disincentive depending upon the Capacity Index achieved, which, among others, is a function of availability of the generating station declared by NHPC during peak hours. In the order under review, the Commission had directed that in case incentive/disincentive could not be implemented, the matter be brought before the Commission for taking an appropriate view.

36. The necessary details for calculation of Capacity Index are available w.e.f. 1.12.2002 after implementation of ABT. NHPC has prayed for prescription of methodology for calculation of incentive/disincentive Capacity Index for the period prior to implementation of ABT. According to RRVPNL, the issue needs to be decided in the light of the provisions of the notification dated 26.3.2001.

37. At the time of hearing of the Review petition on 6.3.2003 we had called the representatives of NREB and NRLDC to hear them on this issue. It was stated by them that the data for calculation of Capacity Index, incentive/disincentive for the period from 1.8.2001 and onwards was available. However, as regards the period from 1.4.2001 to 31.7.2001, data for calculation of Capacity Index, etc. was not available. In the light of the position stated by the representatives of NREB and NRLDC, we do not envisage

any difficulties in calculation of Capacity Index, incentive/disincentive from 1.8.2001 onwards. However, for the prior period, Shri RK Sharma, Director, NHPC stated that the necessary data was available with NHPC. Upon this we had directed that the data be made available by NHPC to NREB/NRLDC for their consideration and decision on calculation of Capacity Index, incentive/disincentive. It was further directed by us that in case of any difficulty, these may be brought to the notice of the Commission. We have not been apprised of any difficulties in this regard and we presume that the issued stands resolved, If the still remains unresolved, the parties are at liberty to approach the Commission for guidance and decision.

#### **Undischarged liability**

38. The Commission in the order under review had adopted gross block of Rs. 3065.90 crore, as on 31.3.1998, from Ministry of Power notification dated 14.5.1999, observing that the amount considered was after disallowing a sum of Rs. 83.47 crore on account of undischarged liability. NHPC seeks review of the particular observation that there was no basis for the presumption. It has been stated that the Commission ought to have considered the claim on merits. We are satisfied that with the review of gross block already permitted, the question of review of observation in regard to undischarged liability no longer survives. We do not consider necessary to give any other direction on the issue raised.

39. Review petition is allowed to the extent indicated in the preceding paras of this order.

40. .We direct that Petition No.61/2001 be set down for hearing on 12.8.2003. However, the respondents shall continue to pay tariff as approved by the Commission in its order dated 1.11.2002 till further orders.

41. With the above order, Review Petition No. 5/2003 stands disposed of.

**Sd/-**  
**(K.N. SINHA)**  
**MEMBER**

**Sd/-**  
**(G.S. RAJAMANI)**  
**MEMBER**

**Sd/-**  
**(ASHOK BASU)**  
**CHAIRMAN**

New Delhi dated the 2<sup>nd</sup> June, 2003