Before

UTTARAKHAND ELECTRICITY REGULATORY COMMISSION

In the Matter of:

Petition No. 11 of 2012

Approval of Capital Investment under Para 11 of the Transmission Licence [Licence No. 1 of 2003] & Application No.43/Director (Project)/PTCUL/UERC dated 05.01.2013 for investment approval of 220 kV Ghansali substation and other associated lines & bay works submitted by Power Transmission Corporation of Uttarakhand Limited.

AND

In the Matter of:

Petition No. 20 of 2012

Dispute between M/s Bhilangana Hydro Power Limited (Bhilangana-III SHP) and Power Transmission Corporation of Uttarakhand Ltd., regarding the obligation to make payment of additional transmission charges for the alleged dedicated transmission network

Coram

Shri Jag Mohan Lal Chairman
Shri C.S. Sharma Member
Shri K.P. Singh Member

Date of Order: 29th April 2013

ORDER

The Petitioner, Power Transmission Corporation of Uttarakhand limited (PTCUL), has sought approval for proposed capital investment vide their Application No. 43/Director (Project)/PTCUL/UERC dated 05.01.2013 for approval under Para 11 of Transmission Licence [Licence No. 1 of 2003].

2. The proposed work comprises of Construction of

- i) 220 kV D/C Bhilangana-III-Ghansali line.
- ii) 220 kV S/C Chamba-Ghansali line.
- iii) 01 No. 220 kV Bay at 220 kV sub-station Chamba.
- iv) 220 kV GIS substation Ghansali.
- 3. The Petitioner had earlier submitted the above works along with other works under the REC-IV scheme. However, the Commission while approving the investment proposal excluded (i) 220 kV S/C Chamba-Ghansali line (ii) 01 No. 220 kV Bay at 220 kV S/s Chamba (iii) 220 kV D/C Bhilangana-III-Ghansali line from REC-IV scheme. The reason given by the Commission is reproduced below:

"With regard to the integrated transmission projects, within the scheme, which are proposed to be developed for evacuation of power from the Generators for sale of electricity outside the State cannot be considered in the system strengthening schemes proposed by the Petitioner. The transmission/wheeling charges for these dedicated lines and sub-stations used only for evacuation of such power shall be borne by the beneficiary generators in accordance with UERC (Tariff and Other Terms for Supply of Electricity from Renewable Energy Sources and non-fossil fuel based Co-generating Stations) Regulations, 2010 and UERC (Terms & Conditions of Intra-State Open Access) Regulations, 2010. However, in case of more than 50% of the total power carried through such system is inter-state power and the system is duly certified by RPC, then these lines shall be non ISTS or deemed inter-state lines in accordance with the provisions of the Electricity Act, 2003 and CERC (Sharing of Inter-state Transmission charges and losses) Regulations, 2010 read with various Removal of Difficulty Order of CERC issued under the aforesaid Regulations. Accordingly, the Commission has decided to exclude the following projects, mentioned in Table-2 below, from REC-IV investment proposal of the Petitioner."

Details of Projects excluded from REC-IV Scheme

| Particulars | Original estimated cost as per DPR (Rs. lacs) | Cost considered by REC (Rs. lacs) |
|---|---|-----------------------------------|
| 220 kV S/C Chamba-Ghansali line | 3722.04 | 2388.75 |
| 01 No. 220 kV Bay at 220 kV S/s Chamba | 205.05 | 133.57 |
| 220 kV D/C Bhilangana-III- Ghansali line | 1276.58 | 784.17 |
| Total | 5203.67 | 3306.49 |

4. The Petitioner vide its letter dated 11.08.2011 also proposed deletion of six projects from overall REC-IV scheme. One of the project was 220 kV AIS substation Ghansali. According to the Petitioner, the decision to construct GIS substation, instead of initially approved AIS, was taken due to land constraints and requested the Commission to de-link the 220 kV AIS substation

- Ghansali from REC-IV scheme. The Commission acceded to the request of the Petitioner and excluded 220 kV AIS substation Ghansali from REC-IV scheme.
- 5. Further, the Commission considered the request made by PTCUL in its ARR & Tariff Petition for FY 2012-13 wherein the Petitioner had stated that as the submission of the proposal under PoC mechanism would take some time, it requested the Commission for approval of ARR for associated transmission system of Bhilangana-III SHP and accordingly, the Commission issued directions vide letter dated 23.03.2012 to PTCUL and the same are reproduced below:
 - "... Considering the request of licensee that completion of formalities/procedures under PoC mechanism, may take a longer time, the Commission directs PTCUL to submit a proposal in the form of Petition for determination of provisional ARR/transmission charges for these transmission assets in accordance with the Regulations of the Commission for recovery of the same from the beneficiary generator till transmission charges are decided by CERC under PoC mechanism."
- 6. Thereafter PTCUL submitted a Petition vide letter no. 703/MD/PTCUL/UERC dated 30.04.2012 for determination of provisional ARR for the FY 2011-12 & FY 2012-13 for the associated transmission system for Bhilangana SHP.
- 7. Meanwhile, PTCUL submitted a Petition vide letter dated 17.04.2012 seeking investment approval for 220 kV S/s at Ghansali. The Commission reiterated its earlier decision with regard to the transmission system including the aforesaid substation at Ghansali associated with Bhilangana-III SHP and directed PTCUL vide letter dated 18.09.2012 to include these four schemes namely 220 kV D/C Bhilangana-III- Ghansali line, 220 kV GIS S/s Ghansali, 200 kV S/C Chamba-Ghansali line & 01 No. 220 kV bay at 220 kV S/s Chamba and submit a separate petition for seeking investment approval in accordance with the CBR. In response to the Commission's letter dated 18.09.2012 and directives issued in its Order dated 11.12.2012, the Petitioner vide its letter 43/Dir (projects)/PTCUL/UERC dated 05.01.2013 submitted a separate Petition including four schemes namely 220 kV D/C Bhilangana-III- Ghansali line, 220 kV GIS S/s Ghansali, 200 kV S/C Chamba-Ghansali line & 01 No. 220 kV bay at 220 kV S/s Chamba for investment approval.
- 8. Clubbing the issues of investment approval, adjudication of the dispute between M/s Bhilangana Hydro Power Limited and PTCUL and determination of ARR of these projects, discussed as above, the Commission issued an Order dated 11.12.2012 vide which the following directions were given to the Petitioner:
 - Para 12 "......The Commission further directs that all the Petitions filed by both the Parties and the compliance of direction of the Commission as below be clubbed together to be dealt for further proceedings in the matter.

- (i) Petition vide letter no. 703/MD/PTCUL/UERC dated 30.04.2012 for determination of provisional ARR for the FY 2011-12 & FY 2012-13 for the associated transmission system for Bhilangana III.
- (ii) Petition dated 24.08.2012 filed by M/s Bhilangana III SHP for adjudication of dispute between M/s Bhilangana Hydro Power Limited and Power Transmission Corporation of Uttarakhand Limited regarding the obligation to make payment of additional transmission charges for the alleged dedicated transmission network.
- (iii) In the matter of direction issued by the Commission vide letter dated 18.09.2012 to include the four schemes namely 220 kV D/C Bhilangana-III- Ghansali line, 220 kV GIS S/s Ghansali, 200 kV S/C Chamba-Ghansali line & 01 No. 220 kV bay at 220 k/V S/s Chamba and submit a separate Petition for seeking investment approval in accordance with the CBR."
- 9. The Commission in this Order has dealt with the issue of investment approval of the projects included in the Petition and adjudication of dispute between M/s Bhilangana Hydro Power Limited (Bhilangana-III SHP) and the Petitioner regarding the obligation to make payment of additional transmission charges for the alleged dedicated transmission network. The determination of the ARR of the projects shall be dealt in the proposed Tariff Order for the first control period of PTCUL.
- 10. On the adjudication issue, the Commission would refer to the adjudication petition dated 24.08.2012 filed by the Generator in which the generator had made the following prayers:

"a. direct that the Petitioner is not liable to make payment for the implementation of the 220 KV Integrated Transmission Network;

b. direct that Petitioner is liable to pay only the transmission charges for wheeling of power outside the State of Uttarakhand under the open access, as determined by the Hon'ble Commission from time to time;

c. hold that the Petitioner is not liable to pay any transmission charges for supplying power to a distribution licensee within the State as per the UERC (Tariff and Other Terms for Supply of Electricity from Renewable Energy Sources and non-fossil fuel based Co-generating Stations) Regulations, 2010, and the order dated 03.08.12 passed by this Hon'ble Commission in Petition no. Nil, which was filed by the Petitioner against the UPCL;

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h. direct the Respondent No. 1 to refund the transmission and SLDC charges, for the power supplied to UPCL from November 2011 to April 2012, which have been paid by the Petitioner under protest, alongwith interest:"

The Commission had passed an interim Order dated 11.12.2012 and during the course of the hearing, the generator had submitted before the Commission that PTCUL has unilaterally raised bills for recovery of transmission charges of the whole transmission system treating it as a dedicated transmission corridor. The generator had further submitted before the Commission that since PTCUL's petition in the matter of determination of ARR of transmission system associated with Bhilangana III SHP is still under consideration before the Commission, therefore PTCUL under the Act/Regulations is not authorised to charge the same from the generator. In the following paragraphs the Commission would deal with the issue of treatment of transmission system included in the investment approval petition as a evacuation and/or a system strengthening network.

11. In order to understand the load profile and hydro power development of Ghansali area, where 220 kV S/s has been proposed by the Petitioner, the Commission in its earlier Order dated 11.12.2012 had directed to issue notices to MD, UPCL and MD, UJVNL which reads as:

"The Commission has decided to issue notice to MD, UPCL to furnish load profile of Ghansali and nearby area and to indicate whether they have given any justification to the Respondent seeking strengthening of the existing 33 kV network by creating a transmission substation at Ghansali. The Commission has further decided to issue notice to MD, UJVNL directing the generating company to indicate status of their proposed hydro generating plant in that area."

12. In compliance of the Commission's directive to MD, UPCL vide its Order dated 11.12.2012 and subsequent notice dated 04.01.2013 to him, MD, UPCL vide its letter dated 02.03.2013 has submitted load profile of Ghansali and nearby area. Aforesaid directive also required MD, UPCL to submit reply on whether any justifications were forwarded to transmission licensee (PTCUL) for seeking strengthening of the existing 33kV network by creating a transmission substation at Ghansali. MD, UPCL has submitted copy of letter dated 12.06.2012 pertaining to request made by Director (Project) of distribution licensee to Director (Project) of transmission licensee for construction of a new 132 kV and/or 220 kV transmission substation at Tehri district forwarding the justification that at present 3 hydro electric plants are under operation in the area and foreseeing development of 5 more hydro electric plants presently under construction/planning stage in the area. Besides the above, the Petitioner in its Petition has also submitted copy of letter dated 31.08.2010 of Director (Project), UPCL justifying the need of 220/33 kV transmission substation at Ghansali and requesting transmission licensee (PTCUL) for construction of the same at the earliest. The relevant extract of the letter are reproduced below:

"..... It is brought to your notice that UPCL is constructing D/C 33 KV line from Ghansali to Pipaldali for evacuation of power of Bhilangana-I Hydro Power Project (capacity 22.5 MVV). The line losses for evacuating the above said power from 33/11 KV S/s Ghansali to 220 KV S/s Chamba via proposed D/C 33 KV Ghansali Pipaldali line will be very high (approx 17.14%). Even at present the losses in evacuating power through Ghansali-Chamba 220 KV line charged at 33 KV are very high (approx 8%). Therefore the evacuation of above said power through proposed Ghansali-Pipaldali D/C 33 KV line is a temporary arrangement.

As discussed in the UERC meeting on dated 23.06.2010 the permanent solution to evacuate the power from Bhilangana-I Hydro power project & other small hydro projects of the area is construction of 220 KV S/s Ghansali by PTCUL.

At present total capacity of commissioned and under-commissioning plant in this area is approximately 70 MW, therefore the capacity of 220 KV S/s Ghansali of PTCUL may be kept 2x50 MVA for proper evacuation of power plants and augmentation of power supply requirements of the area as well."

- 13. MD, UJVN Ltd , State Generating Company and also a designated nodal agency for development of hydro electric projects in the State, in compliance of the Commission's directive vide its Order dated 11.12.2012 and subsequent notice dated 04.01.2013 to him, submitted list of existing/proposed hydroelectric projects around Ghansali area. According to which , 3 generating stations are currently under operation namely Bhilangana-III (24MW), Bhilangana-I (Swasti Power) (22.5) and Agungda Thati (3MW) and another 5 stations namely Bhilangana-IIA(24MW), Bhilangana—IIB (24MW), Bhilangana-II C (21MW), Kot-Buda Kedar (6MW), Balganga-II (7MW) and Jhala Koti (12.5MW) are in different stages of development namely finalisation of DPR, Execution of Implementation Agreement, Approval from the State Government, etc. The Petitioner in its petition has submitted that the above generating stations which are connected/proposed to be connected through long 33 kV lines will be connected to 220/33 kV GIS substation Ghansali thereby ensuring reliable evacuation of power from these generators.
- 14. The Petitioner while justifying need of the proposed schemes has submitted in its petition that UPCL's 33/11 kV substation in Ghansali area are at present fed by long 33 kV lines/feeders from 220 kV Chamba and 132 kV Srinagar substations resulting in poor voltage profile and high line losses. The Petitioner has submitted that after commissioning of 2x30 MVA, 220 kV GIS substation at Ghansali, length of these 33 kV lines/feeders shall reduce considerably resulting in improved voltage profile in the area and reduction of line losses besides facilitating reliable evacuation of power from existing/upcoming generators in the area. The Petitioner has further submitted that after commissioning of 220 kV Substation at Ghansali there will be shifting of 13.5 MW load from

- 2x25 MVA, 220 kV Substation Chamba which will enable meeting of (N-1) contingency criteria at Chamba substation in case of any breakdown in transformer at the substation. The Petitioner has also submitted that proposed substation will also cater to the load of Ghansali and nearby area for giving better quality of supply to distribution network of UPCL at its existing 33 kV substation in the area namely 33 kV Substation Ghansali, 33 kV Substation Rajakhet, 33 kV Substation Jakholi.
- 15. With regard to 220 kV D/C Bhilangana-III Ghansali line, the Petitioner has submitted that presently this line is being utilised for evacuation of power from Bhilangana-III SHP which shall in future be used for evacuation of power from UJVN Ltd's proposed plant namely Bhilangana-II HEP.
- 16. Based on the above, the Commission is of the view that except for 220 kV D/C Bhilangana-III-Ghansali line other projects namely 220 kV GIS substation at Ghansali, 220 kV S/C Chamba Ghansali line and 01 No. bay at 220 kV substation Chamba need be considered as system strengthening works of the transmission licensee and cost of these works, therefore will be included in the overall ARR of Transmission Licensee (Petitioner in the matter) to be recovered from distribution licensee of the State.
- 17. With regard to 220 kV D/C Bhilangana-III- Ghansali line, the Commission considers this as a transmission line which will be primarily used for evacuation of power from existing and proposed hydro generating stations in the area. The Commission has taken note of the fact that as of now while one circuit of this double circuit line is strung upto 220 kV S/s at Chamba and is being used for evacuation of power from the existing generating station namely Bhilangana-III (24 MW) the other circuit is strung upto Ghansali and is proposed to be connected to upcoming 220 kV S/s at Ghansali. It is apparent that only one circuit has been energised and put to use. Taking cognizance of the provisions of the Tariff regulations that any capital expenditure towards creation of an asset is deem fit for capitalization only if that asset is put to use, therefore, the Commission has decided to allow cost of servicing/ARR on only 50% of the capital cost incurred by the Petitioner towards the construction of the 220 kV D/C Bhilangana -III- Ghansali line which shall be recovered from the generator namely Bhilangana-III SHP, the only beneficiary as of now, subject to pro-rata recovery of this cost from other generators as and when they are commissioned and connected with this line. As far as the recovery of the balance capital cost of the line, disallowed as above, the Commission will take a view as and when the second circuit of the line is energised and put to use. Notwithstanding to what has been stated above, the Commission is also of the view that this line needs to be included by the Petitioner in the PoC mechanism for recovery of transmission charges as deemed ISTS system in accordance with CERC (Sharing of Inter-state

Transmission charges & losses) Regulations, 2010, then the Petitioner shall accordingly recover the charges applicable thereof from the Generator. However, to obviate the financial difficulties being faced by the Petitioner due to non-servicing of the asset, a purely provisional determination is being made which will be subject to adjustment on determination of transmission charges for this line as deemed ISTS line by CERC.

- 18. Accordingly, the contention of the Generator in its adjudication petition that the entire transmission system from Bhilangana III SHP to Chamba should not be treated as dedicated system stand resolved to the extent that 220 kV GIS substation at Ghansali, 220 kV S/C Chamba Ghansali line and 01 No. bay at 220 kV substation Chamba shall be considered as system strengthening works of the transmission licensee and one circuit of 220 kV D/C Bhilangana-III-Ghansali line shall be considered as a transmission line for evacuation of power from the Generators.
- 19. The 220 kV D/C Bhilangana-III- Ghansali line, 200 kV S/C Chamba-Ghansali line & 01 No. 220 kV bay at 220 kV S/s Chamba have been considered by REC under REC-IV scheme while 220 kV GIS substation have been considered under REC-X scheme by REC for providing loan assistance.
- 20. In its revised Petition dated 05.01.2013, the Petitioner has submitted executed cost of the schemes namely 220 kV D/C Bhilangana-III- Ghansali line, 200 kV S/C Chamba-Ghansali line & 01 No. 220 kV bay at 220 kV S/s Chamba and the same along with estimated capital cost in the DPR and that considered by REC are presented in Table 1 given below:

Table 1: Details of Capital cost of works under REC-IV scheme

| Particulars | Estimated cost as per DPR (Rs. lacs) | Cost considered by REC (Rs. lacs) | Executed Cost as submitted by the Petitioner (Rs. lacs) |
|---|--|---|---|
| 220 kV S/C Chamba-Ghansali line | 3722.04 | 2388.75 | 1795.16 |
| 01 No. 220 kV Bay at 220 kV S/s Chamba | 205.05 | 133.57 | 254.00 |
| 220 kV D/C Bhilangana-III-Ghansali line | 1276.58 | 784.17 | 2191.21 |
| Total | 5203.67 | 3306.49 | 4240.37 |

21. Since 220 kV GIS substation at Ghansali is under development stage, the estimated capital cost in the DPR and the cost considered by REC for the proposed substation is presented in Table 2 given below:

Table 2: Details of Capital cost of work under REC-X Scheme

| Particulars | Estimated cost as per DPR (Rs. lacs) | Cost considered by REC (Rs. lacs) |
|-----------------------|--------------------------------------|--------------------------------------|
| 220 kV GIS substation | 12480.00 | 12265.19 |
| Total | 12480.00 | 12265.19 |
| Debt(70% of above) | 8736.00 | 8585.64 |
| Equity(30% of above) | 3744.00 | 1 |

- 22. The Petitioner has submitted that the executed cost of 220 kV D/C Bhilangana-III-Ghansali line, 01 No. 220 kV Bay at 220 kV S/s Chamba includes IDC, whereas, the cost of 220 kV Chamba-Ghansali line does not include IDC since no interest was paid to REC as the line was completed before the drawal of loan. With regard to capital cost of 220 kV GIS substation at Ghansali, REC has considered cost of Rs. 12265.19 lacs which includes IDC.
- 23. The Commission has observed that against the capital cost of Rs. 124.80 Crore (including IDC) submitted by PTCUL for 220 kV GIS substation at Ghansali, REC has considered capital cost of Rs. 122.65 Crore only and accordingly, a loan assistance of Rs 85.86 Crore against the debt requirement proposed by PTCUL of Rs. 87.36 Crore has been sanctioned by the financial institution. Thus, there is a shortfall of Rs. 1.50 Crore in terms of debt funding. Besides debt component, PTCUL has claimed that the equity component amounting to Rs. 37.44 Crore shall be funded by GoU. However, the Petitioner did not provide any documentary evidence in support of State Government's commitment for funding of this amount in its petition.
- 24. The above shortcomings in terms of shortfall in capital cost funding were intimated to the Petitioner vide Commission's letter dated 07.08.2012. Thereupon, PTCUL submitted its reply on 24.08.2012. With regard to shortfall in debt funding, PTCUL has submitted a copy of REC's letter dated 09.05.2012 vide which the financial institution has informed PTCUL that the sanctioned loan assistance was on the cost considered by REC. However, the financial institution informed PTCUL to go ahead with the execution of the proposed scheme and the actual cost of award/execution of the schemes may be intimated to them at the appropriate time later on, for any revision in its sanctioned loan assistance to PTCUL.
- 25. With regard to funding of the equity portion, PTCUL has informed that it shall be funded by GoU However, no letter from the Government or any such documentary evidence entailing Government's commitment towards equity funding is submitted by the Petitioner.
- 26. The Petitioner has proposed REC's loan assistance at the interest rates under each of the following options as given below:

Table 3: Rate of Interest for Projects covered under REC IV Scheme

| 14210 31 1440 31 1440 30 131 113 300 30 131 41 30 131 131 30 131 | | | |
|--|---|--|--|
| Option I | Option II | | |
| Effective interest rate with reset after every 3 years | Effective interest rate with reset after 10 years | | |
| 13.50% | 14.00% | | |

Table 4: Rate of Interest for Projects covered under REC X Scheme

| Tuble 1: Made of interest for Frojects covered under NEC A sentence | | | | |
|---|---|--|--|--|
| Option I | Option II | | | |
| Effective interest rate with reset after every 3 years | Effective interest rate with reset after 10 years | | | |
| 13.00% | 13.25% | | | |

- 27. As per the REC's sanction letter, tenure of the loan is 13 years and the Petitioner would pay interest on the loan at the applicable rate of interest for the entire period of 13 years from the date of release of first installment. However, with regard to payment of principal there is a moratorium period of 3 years from the 15th day of the month of the disbursement of first installment of loan.
- 28. The Petitioner has confirmed that the work proposed under this EHV project for assistance under P:SI (Transmission) Category through REC has not been financed or tied up for financial assistance from any other source or lending organization and, thus, there is no duplicate financing for the proposed works.
- 29. The Petitioner has submitted a copy of the extract of the Minutes of the Meeting dated 19.09.2011 wherein the Petitioner's Board has approved Corporation's proposal for financing the 220 kV GIS substation Ghansali under separate scheme and has also approved the revised cost of projects covered under REC-IV scheme. Summary of the capital costs has already been presented in Table 1 & Table 2 above.
- 30. Based on the above, the Commission decides as under:

I- Petition No.11 of 2012

For investment approval of 220 kV Ghansali substation and other associated lines & bay works submitted by Power Transmission Corporation of Uttarakhand Limited.

The Commission has no objection to the Petitioner going ahead with this capital investment subject to fulfillment of the following conditions:

- (a) All the loan conditions as may be laid down by REC while approving REC-IV and REC-X in their detailed sanction letter are strictly complied with. However, the Petitioner is directed to explore the possibility of swapping this loan with cheaper debt option available in the market.
- (b) The Petitioner shall, as and when the need arises submit detail specifying funding arrangement for the balance debt over and above that sanctioned by REC.
- (c) The Petitioner shall, within one month of the Order, submit letter from the State Government or any such documentary evidence in support of its claim for equity funding agreed by the State Government or any other source in respect of the proposed scheme.
- (d) After completion of the project within the scheme, the Petitioner shall submit the completed cost and financing of the scheme.

(e) The cost of servicing project costs shall be allowed in the Annual Revenue Requirement of the Petitioner after the assets are capitalised and subject to prudency check of costs incurred by the Petitioner except for the cost of Bhilangana-III - Ghansali line whose cost shall be recovered in accordance with the provisions of Para 17 of the Order.

II- Petition No. 20 of 2012

Regarding dispute between M/s Bhilangana Hydro Power Limited (Bhilangana III SHP) and Power Transmission Corporation of Uttarakhand Ltd., regarding the obligation to make payment of additional transmission charges for the alleged dedicated transmission network.

The Commission has decided that the transmission charges payable by the Generator towards 220 kV D/C Bhilangana-III-Ghansali line shall be determined in the proposed Tariff Order for PTCUL for the 1st control period (FY14 to FY16) on principles mentioned in **Para 17** of this Order. These charges are provisional and will be replaced by the charges determined under the PoC mechanism by CERC. The Commission allows the Petitioner to recover these charges till December 2013 or till charges under PoC mechanism are determined. In case charges under PoC mechanism are not determined till December 2013, Petitioner should come up for further continuance of these charges furnishing details of efforts made/actions taken in this regard. The Commission may consider further continuance of these charges after satisfying itself of the due diligence of the Petitioner.

Accordingly, the Petitions are hereby disposed off.

(K.P. Singh) Member (C.S. Sharma) Member (Jag Mohan Lal) Chairman