

**CENTRAL ELECTRICITY REGULATORY COMMISSION
NEW DELHI**

Coram:
Shri P.K. Pujari, Chairperson
Shri A.K. Singhal, Member
Shri A.S. Bakshi, Member
Dr. M.K. Iyer, Member

Dated: 23rd of May 2018

In the matter of:

Representation of AD Hydro Power Limited pursuant to the directions of Hon'ble High Court of Himachal Pradesh in Writ Petition No.6883/2014.

Parties Present: Dr. Seema Jain, Advocate, AD Hydro Power Limited
Shri Praveen Kumar Giri, AD Hydro Power Limited
Ms. Kakoli Sengupta, AD Hydro Power Limited
Shri Sumit Garg, AD Hydro Power Limited
Shri Ashok Rajan, POSOCO
Shri G Chakraborty, POSOCO
Shri Swapnil Verma, PGCIL
Ms. Jyoti Prasad, PGCIL

ORDER

AD Hydro Power Limited (ADHPL) has set up a 192 MW Run of the River Hydro Electric Project (RoR HEP) in the State of Himachal Pradesh for generation and sale of electricity by utilizing the water of Allain and Duhangan Nallahs, which are tributaries of River Beas. ADHPL has constructed a 175 km long ADHPL-Nalagarh 220 kV D/C dedicated transmission line for evacuation of power from its generation project to the PGCIL's Pooling Station at Nalagarh. ADHPL was granted Long Term Open Access(LTOA) by Central Transmission Utility (CTU) for 192 MW which has been reduced to 169 MW after excluding the free power to the State of Himachal Pradesh vide order dated 16.10.2015 in Petition No. 210/MP/2014 with effect from the effective date of LTA. Therefore, the LTA quantum granted to ADHPL is 169 MW from the



effective date of the LTA. ADHPL does not have any long term Power Purchase Agreement with any State Utility for supply of power and consequently, ADHPL is supplying power through bilateral transactions and collective transaction at the Power Exchange by availing Short Term Open Access from Northern Regional Load Despatch Centre or National Load Despatch Centre respectively. For Short Term Open Access, ADHPL is required to pay short term open access charges which are offset against its liability for long term access charges.

2. ADHPL filed the Writ Petition No.6883/2014 before the Hon'ble High Court of Himachal Pradesh challenging the Central Electricity Regulatory Commission (Sharing of inter-State Transmission Charges and Losses) Regulations, 2010 (hereinafter referred to as "2010 Sharing Regulations"), and alleging that the said regulations do not provide a level playing for the RoR HEPs when compared to the Thermal Generating Stations. ADHPL has prayed for framing new regulations or for amending the existing 2010 Sharing Regulations to take care of the interest of the RoR HEPs. Hon'ble High Court of Himachal Pradesh vide order dated 14.12.2017 issued the following directions:

"Heard further. We are of the considered view that taking into consideration the technical nature of the case, it would be appropriate, if at this stage, the petitioner makes a representation to respondent No.1 who, in turn, thereafter shall convene a meeting and take decision upon such representation after hearing the representative(s) of the petitioner. Let this exercise be completed within three weeks."

In compliance with the above directions, ADHPL has made the representation dated 28.12.2017.

3. ADHPL in its representation dated 28.12.2017 has made the following



submissions:

- (a) As per the 2010 Sharing Regulations, the transmission charges and losses of inter-State transmission systems (ISTS) are to be shared by various categories of customers which includes power station/generating station. ADHPL which is operating a RoR HEP and has been granted long term access by the Central Transmission Utility is also required to share the transmission charges and losses for the ISTS in terms of the present contracted capacity as per the long term access granted to it at Nalagarh.
- (b) The generation from the plant of ADHPL depends on the availability of water which increases to a maximum level during summer and monsoon season as high as 110 to 120% and reduces to a minimum level of as low as 10% of the installed capacity during the winter season. However, ADHPL is required to share the transmission charges and losses for actual usage during the peak season and 100% equivalent to contracted capacity during the lean season. ADHPL is not in a position to continuously use its generation facilities and LTA granted for use of ISTS corridors due to vagaries of nature. ADHPL has explained the variation in generation by comparing a 200 MW Run of the River Hydro Electric Project running at 45% plant load factor with that of a 200 MW Thermal Power Plant running at 90% of the plant load factor and has submitted that while the energy actually injected by the Run of the River Hydro Power Plant is approximately 685 MUs, the energy actually injected by the thermal power plant is approximately 1435 MUs. While efficient management of fuel and other



resources by thermal power project results into high generation and thereby optimum utilization of transmission corridors given by way of long term access, the RoR HEP like ADPHL is never in a position to use it but is required to bear the transmission charges and losses at the equal rates with a thermal power projects because they are calculated in terms of MW.

(c) As per the 2010 Sharing Regulations, a customer can use the ISTS corridor on short term basis and medium term basis only under two situations i.e. when there are inherent margins available in the ISTS and when there is under-utilisation of a long term access granted to a Designated ISTS Customer (DIC). Since the RoR HEP has a greater probability of under-utilisation of its transmission corridors, a major part of the transmission charges goes into the kitty of other utilities pursuant to the provisions of the Sharing Regulations.

(d) The cost of the entire system is being borne by the Long Term Access Customers (LTA Customers) but the entire system may not be reserved for LTA Customers. The inherent margins in the ISTS could be used by others. After use of the inherent margins, the spare margins left by the LTA Customers are utilised by other entities. Apart from sharing of the capacity against the inherent margin in the system, the LTA Customers who have left the capacity for use by others should be reimbursed the charges as it is the LTA Customer's spare capacity that is being used. Though the Petitioner is benefitted by the STOA and MTOA charges paid by the customers, but the said charges are paid to all the customers irrespective of whether they have made available any spare capacity



or not and therefore, such LTA Customers are unjustly enriched.

(e) The provisions of various regulations issued by CERC (such as Short Term Open Access Regulations and UI/DSM Regulations) and systems installed by the Agencies are capable to calculate the quantum of short term open access and medium term open access charges arising due to inherent capacities in the ISTS and due to capacities remaining unutilised by the LTA Customers. ADHPL has submitted that a pragmatic method be evolved in such a manner that RoR HEP be reimbursed as far as possible to the extent that they have made available spare capacities from their contracted capacities which is also envisaged in the National Electricity Policy and Tariff Policy.

4. Considering the issues raised by ADHPL, the Commission sought the assistance from the Central Transmission Utility (CTU), Northern Regional Power Committee (NRPC) and Power System Operation Corporation Limited (POSOCO). CTU is responsible for planning of ISTS in consultation with Central Transmission Utility and stakeholders, for grant of Long Term Access and Medium Term Open Access to ISTS, and for billing, collection and disbursement of the transmission charges in terms of the Sharing Regulations. NRPC is responsible preparation and issue of Regional Transmission Accounts. POSOCO is a statutory body under the Electricity Act, 2003 to carry out scheduling and despatch functions at the national, inter-regional and regional level. National Load Despatch Centre functioning under POSOCO acts as the nodal agency for implementation of the PoC mechanism under Sharing Regulations.

5. CTU, NRPC and POSOCO have filed their comments on the representation of



ADHPL and have assisted the Commission during the hearing. The Commission also heard the learned counsel and the representative of ADHPL.

6. CTU in its comments has submitted that the transmission system is planned on the basis of the peak power transfer requirement from various injections points to load Centres with reliability and security in accordance with the Central Electricity Authority's Transmission Criteria. A transmission system is finalised in consultation with stakeholders in the Regional Standing Committee/Regional Power Committee and thereafter taken up for implementation. Further, power flow on transmission system depends on a number of factors such as load-generation scenarios, seasonal variations, weather, etc. The sharing of transmission charges are based on capacity (MW), and not on energy flow (MU) through the transmission system.

7. NRPC has submitted that the estimated peak injection by hydro generating stations is considered for calculation of PoC charges and less generation by hydro generators is captured in the data considered by the Validation Committee constituted in accordance with the Sharing Regulations. NRPC has also submitted that the transmission charges of the LTA customers are offset by the MTOA and STOA charges and the charges recovered for any withdrawal/injection beyond 20% by any DIC is adjusted against transmission charges of all the DICs. Thus, if the LTA granted to a generator is used for MTOA or STOA transactions, the generator is also benefitted. ADHPL's plea that only ADHPL should get the benefit of the spare capacity provided by ADHPL for use of MTOA or STOA would necessitate determination of actual usage of the spare capacity of ADHPL by the DICs for each 15 minute block, which is



cumbersome and requires micro level calculation.

8. POSOCO has submitted that transmission is planned based on scenarios of load and generation at different places and in a meshed transmission network, there is no line wise capacity allocation to any entity. The entire network is considered for the safe and secure operation of power system. The flow of power in the transmission system keeps on changing over the day and over the seasons. The transmission system is built for maximum quantum or peak requirement even if the same is used only for a limited period. The transmission systems are built primarily for LTA Customers who agree to pay the charges for the useful life of the transmission systems. The transmission charges collected from the short-term utilization of the transmission system is used to reduce the charges for the LTA Customers. Further, the charges realized from the over utilisation by the LTA Customers is also used to reduce the overall transmission charges payable by the LTA Customers.

9. The Commission has considered the representation of ADHPL in the light of the provisions of the extant regulations and the assistance rendered by CTU, NRPC and POSOCO. The main grievance of ADHPL in its representation is that the RoR HEPs like ADHPL are in a disadvantageous position in so far as payment of transmission charges are concerned since their PLF is lower in comparison to thermal generating stations and their spare capacity utilized by other entities should be reimbursed to them in the ratio of actual utilization of their spare capacity. As per ADHPL, the STOA and MTOA charges collected against utilization of the unutilized LTA capacity should not be reimbursed to all LTA Customers but only to those LTA customers who have



underutilized the LTA and made the unutilized capacity available for utilization through MTOA/STOA.

10. The Commission is of the view that transmission system is planned in accordance with the CEA's Transmission criteria based on scenarios of load and generation at different places and projected peak scenarios. In a meshed transmission network, there is no line-wise capacity allocation to any entity. The entire network is considered for the safe and secure operation of power system. The provisions regarding transmission pricing has been envisaged in the National Tariff Policy as under:

"7.1 Transmission pricing

(2) The National Electricity Policy mandates that the national tariff framework implemented should be sensitive to distance, direction and related to quantum of power flow. This would be developed by CERC taking into consideration the advice of the CEA. Such tariff mechanism should be implemented by 1st April 2006."

In order to implement the above mandate of the National Electricity Policy, the Commission has specified the Sharing Regulations after extensive stakeholders' consultations. While framing the Sharing Regulations, access and usage of the transmission systems are the basic parameters considered. Access is considered for the entire maximum quantum for which infrastructure is built. For Usage, the quarterly projected peak scenarios of the users of the ISTS are considered. Under the Sharing Regulations, NLDC as the Nodal Agency seeks projected peak injection and projected peak drawal for the next quarter from the DICs which includes the generators connected to ISTS. The share of transmission charges of the DICs (which includes LTA



Customers) is determined in accordance with data submitted by the DICs i.e. charges are based on projected usage of ISTS in line with tariff policy as quoted above.

11. In case of RoR HEPs like that of ADHPL, the transmission charges would depend on its injection projection as well as the injection projection of other generators and the drawal projections of the distribution companies. When the RoR HEP has a lower injection projection in a particular quarter, it is allocated lower transmission charges for the said quarter. Therefore, the concerns of ADHPL as a RoR HEP on account of lower injection of power during a quarter have been addressed under Tariff Policy and the Sharing Regulations.

12. ADHPL does not have long term Power purchase Agreement with any Utility. Consequently, it is selling its entire generation by availing short term open access through bilateral transactions and collective transactions at the power exchanges. Prior to Third Amendment to the Sharing Regulations, offset of STOA charges against the LTA charges was being allowed only if the power was sold in the target region (region indicated in the LTA Agreement). After the Third Amendment, the offset of STOA against the LTA charges has been allowed if the power is sold to any region including sale at the power exchanges. Therefore, after the notification of the Third Amendment, ADHPL is getting direct offset of the STOA charges paid by ADHPL against its liability for LTA charges.

13. Under the regulations of the Commission, the inherent margin in the ISTS and the unutilized LTA capacities are utilized by granting medium term open access and short term open access. Since the transmission charges for ISTS are recovered fully



from the LTA Customers, the charges recovered from the MTOA and STOA Customers are distributed among the LTA Customers. As per the Sharing Regulations, LTA and MTOA charges recovered are included in Bill 1 and reimbursed to the ISTS transmission licensees. The additional MTOA charges and STOA charges are distributed among the LTA Customers in terms of Regulation 12(2) of Sharing Regulations and Regulation 25 (2) of Open Access Regulations respectively in proportion to the monthly transmission charges. Since additional MTOA charges and STOA charges are pooled together on pan India basis and reimbursed to the LTA Customers in proportion to their monthly transmission charges, the Petitioner is also being reimbursed the additional MTOA charges and STOA charges paid by the customers in all regions as per the Sharing Regulations.

14. CTU has submitted that the transmission system including the ISTS is planned on the basis of peak power transfer requirements from various injection points to load centres with reliability and security satisfying the CEA's Transmission Planning Criteria. Further, the sharing of transmission charges are based on capacity (MW), and not on energy flow (MU) through the transmission system. POSOCO has submitted that it is also not possible to identify the individual non-utilisation and consequent utilisation of the transmission systems by someone else. The Commission agrees with the views of CTU and POSOCO that in a meshed network, it is not feasible to identify the actual usage of the unutilized LTA capacity by STOA and MTOA customers for one to one settlement. Therefore, the contention of ADHPL that it should be given one to one reimbursement against utilization of its unutilized LTA capacity by MTOA and STOA Customers cannot be accepted for the reasons stated above.



15. During the hearing, a suggestion was made that the matter may be referred to a committee constituted by the Commission with one of its Members as its Chairperson to look into the working of the Sharing Regulations. However as the Commission does not find any merit in the issue raised by ADHPL in its representation, the suggestion for reference to the committee is not accepted.

16. The representation ADHPL dated 28.12.2017 is disposed of in terms of the above.

sd/-
(Dr. M.K. Iyer)
Member

sd/-
(A.S. Bakshi)
Member

sd/-
(A.K. Singhal)
Member

sd/-
(P.K. Pujari)
Chairperson

