Central Electricity Regulatory Commission New Delhi

Interlocutory Application No.15/2012 in

Petition No. 23/GT/2011

Coram: Shri S.Jayaraman, Member

Shri V.S.Verma, Member

Shri M.Deena Dayalan, Member

Date of Hearing: 6.9.2012
Date of Order: 31.12.2012

In the matter of

Interlocutory Application under Regulation 44 of the Central Electricity Regulatory Commission (Terms and Conditions of Tariff) Regulations, 2009 for recovery of annual fixed charges in respect of Chutak Hydroelectric Project (4 x11 MW) and Clause-4 of Part-7 of the Central Electricity Regulatory Commission (Indian Electricity Grid Code) Regulations, 2010 for relaxation of operational and/or technical norms of operation.

And

In the matter of

Approval of generation tariff of Chutak Hydroelectric Project (4 x11 MW) for the period from 1.9.2011 to 31.3.2014

And

In the matter of

NHPC Ltd, FaridabadPetitioner

Vs

Power Development Department, Srinagar (J&K)Respondent

Parties Present:

Shri R.Raina, NHPC

Shri Amrik Singh, NHPC

Shri S.K.Meena, NHPC

Ms. Gayatri Devi, NHPC

Shri Rajeev Hustu, NHPC

Shri Shashank K. Lal, Advocate and Standing Counsel for PDD, State of J&K

Shri Vikas Sharma, PDD, State of J&K

ORDER

Petition No. 23/GT/2011 has been filed by the petitioner, NHPC, for approval of generation tariff of Chutak Hydroelectric project, (4 x 11 MW) ('hereinafter the generating station") for the period from 1.9.2011 to 31.3.2014 based on the Central Electricity Regulatory Commission (Terms and Conditions of Tariff) Regulations, 2009 ('the 2009 Tariff Regulations').

2. The generating station situated in the State of J&K, has been designed as a purely run of the river scheme and comprises of four units with a capacity of 11 MW each. The project has been sanctioned by the Government of India during August, 2006 at a cost of ₹621.26 crore (at December, 2005 price level). The petitioner has entered into a Power Purchase Agreement (PPA) with the Government of J&K on 26.10.2005 and the power allocated from the generating station as per Ministry of Power, Government of India letter dated 2.9.2011 is as under:

	% share	Equivalent MW (in gross capacity)
Allocation to State of J&K	72	31.68
Unallocated share	15	6.60
Home state share (free) to J&K	12	5.28
Free Power to State of J&K towards	1	0.44
Land Area Development Fund		

3. The petitioner, in its petition filed *vide* affidavit dated 30.8.2011 has submitted that though the generating station was scheduled to be commissioned by 23.2.2011 as per order of the CCEA, on account of extreme cold weather and less working season available, the construction of the project remained affected, despite best efforts to commission the same in time. The petitioner has also submitted that the generating station is expected to be declared under commercial operation from 1.9.2011 after demonstrating the peak

capability as and when sufficient inflow shall be available, in terms of the provisions of the 2009 Tariff Regulations.

4. The total anticipated capital cost of the project as on the date of commercial operation (1.9.2011) is ₹914.14 crore (after adjustment of depreciation amount of ₹3.17 crore pertaining to construction period). It has also submitted that initially evacuation of power from Nimoo Bazgo and the Chutak HEP (the generating station) was proposed at 33 kV. However, CEA vide its letter dated 13.11.2007 had recommended that 66 kV transmission system would be more suitable for evacuation of power from Nimoo Bazgo and the Chutak HEP and further transmission to Leh/ Kargil and adjoining areas from where the respondent shall make own arrangements to absorb power through 66 kV/11kV system. It was also decided that the petitioner would take up the construction of evacuation line for Nimoo Bazgo and the Chutak HEP in consultation with the respondent. In terms of the said decision, step-up transformers and other electrical auxiliaries have been installed in the project by the petitioner. The petitioner has further submitted that the project cost has increased due to various reasons such as price escalation, exchange rate variation, enhancement of taxes, IDC, change in evacuation voltage from 33 kV to 66 kV, change in scope/site conditions, over & under provisions and due to enhancement/reduction in expenditure on various heads. It has also submitted that the Revised Cost Estimate of the project amounting to ₹913.25 crore has been submitted to the Ministry of Power, Government of India on 29.11.2010. As directed by the Commission, the petitioner has submitted the reasons for time and cost overrun of the project and other additional information vide its affidavit dated 19.11.2011.

Interlocutory Application

- 5. While so, the petitioner *vide* affidavit dated 11.4.2012 has filed this Interlocutory Application under Regulation 44 of 2009 Tariff Regulations, 2009 for recovery of annual fixed charges based on actual energy generated from the generating station as per available load and for relaxation of operational/technical norms in terms of Clause-4 of Part-7 (Miscellaneous) of the Central Electricity Regulatory Commission (Indian Electricity Grid Code) Regulations, 2010 (hereinafter "IEGC") with specific prayers as follows:
 - (a) Allow the reimbursement of Annual Fixed Charges (AFC) through normative Capacity Charges & Energy Charges as per actual performance of Chutak HE Project, as detailed at para-12.
 - (b) Allow the relaxed norms for NAPAF and Design Energy for Chutak HE Project till full load is made available and project is connected with regional grid / state grid whichever is later, as detailed at para-12.
 - (c) Exempt the Chutak HE Project from fulfilling the operating & technical standards as specified in IEGC Regulations, 2010 till the project is connected to regional / State grid and availability of full load whichever is later.
 - (d) Allow the infirm power to be charged at a rate of ₹1.65/kWh as provided by the CERC (Unscheduled Interchange charges and related matters) (Second Amendment) Regulations, 2012 *vide* amendment No.L-1(1)/2011-CERC dtd.5th March, 2012.
 - (e) The Hon'ble Commission is humbly requested to grant an early hearing as the Generating units are ready for commercial operation as per availability of load.
 - (f) Pass such further order or orders as may be deemed just and proper in the facts and circumstances of the case.
- 6. The application was admitted on 17.5.2012 and notice was issued to the respondent. The Commission further directed issuance of notices to the State Load Despatch Centre, J&K, Central Transmission Utility, Central Electricity Authority and the Rural Electrification Corporation to file their response on arrangement for evacuation of power from the generating station. The application was finally heard on 6.9.2012 and orders were reserved with a direction to the parties to file their written submissions.

7. Reply to the petition and written submissions have been filed by the respondent and the petitioner has filed its rejoinder/response to the said reply/written submissions. The State Load Despatch Centre, J&K, Central Transmission Utility, Central Electricity Authority and the Rural Electrification Corporation have not filed any responses in the matter. We now proceed to consider the prayers of the petitioner in the subsequent paragraphs.

Recovery of Annual Fixed Charges and Energy Charges

- 8. As regards the prayer for recovery of annual fixed charges and energy charges based on actual energy generated as per available load, the petitioner has mainly submitted as under:
 - (a) CEA had planned the evacuation system at 66 kV/11 kV from the generating station as it would be more suitable for evacuation of power as well as for distribution system in Kargil area. The power evacuation system beyond switchyard of the generating station was to be constructed by the respondent and it is learnt that it is further connected to other sub-stations viz., Gramthang, Kargil, Mulbek, Sankoo, Khangral, via the 66 kV transmission line. However, the respondent has been able to complete the said interconnection only partially.
 - (b) Though the respondent had agreed to provide load upto 10 MW, the same could not be provided as intimated by letter dated 14.2.2012/23.3.2012. The generating station is ready for declaration under commercial operation in terms of Regulation 3(12) of the 2009 Tariff Regulations. However, as the 66/11 kV evacuation system beyond the switchyard of the generating station, which was to be arranged by the respondent has not been completed, there is no sufficient load available in the grid. This situation is beyond the control of petitioner and hence the generating station may be allowed to be declared under commercial operation at reduced load.
 - (c) Though M/s BHEL (OEM) initially confirmed that the units can only run above 7.8 MW and so connected load should be 7.8 MW or higher, on further request of the petitioner, it recommended that units be allowed to run from 1 MW to 3 MW, with continuous monitoring of vibrations & noise remains along with air admission through the top cover in addition to central aeration through the shaft. It also cautioned that under this operation no performance test, field

efficiency test etc., will be applicable and maintenance cost would be high due to inlet edge cavitation.

- (d) Even if all four units are declared under commercial operation, it is possible that only one unit could be run on partial load due to non-availability of local load and non-availability of regional and/ or state grid.
- (e) Efforts are being made by CEA through the respondent to Commission the 66 kV/11 kV power evacuation system in Kargil area so that the desired load of 44 MW is available at the switchyard of the generating station. Due to the non-availability of regional/state grid and non-availability of sufficient load in the local network actual generation in MW and energy in MU would entirely depend on the connected load. The petitioner may be allowed to recover the entire annual fixed charges based on the actual energy generated from the generating station as per the available load.
- 9. The respondent in its reply dated 6.8.2012 has submitted as under:
 - (a) For evacuation of power from the generating station, the onus of failure lies with the petitioner in view of the fact that;
 - (i) The petitioner was aware that the 220 kV Srinagar-Leh transmission and 220/33 kV sub-stations would not be available during the 11th and 12th plan and hence the generating station cannot be connected to regional/state grid.
 - (ii) The job of developing the 66/11 kV system proposed by CEA and integration of various islands of load through the said network under RGGVY scheme in Kargil was entrusted to the petitioner.
 - (iii) The petitioner totally failed to develop the said 66/11 kV network in time and is responsible for arriving at a situation where it is unable to evacuate power although sufficient load is available with the respondent, but due to incomplete network cannot be connected to the generating station. The petitioner is thus liable for the delay and loss of energy.
 - (b) The petitioner on account of its own failures is neither able to demonstrate its peaking capability corresponding to its installed capacity through trial runs nor is able to implement a scheduling process as per IEGC. Therefore, the generating station or its units cannot be declared under commercial operation in the present situation and the respondent is not liable for any charge.

- (c) The interlocutory application is liable to be rejected and the petitioner may be directed to develop the 66/11 kV evacuation network without any further delay.
- 10. In response, the petitioner in its rejoinder *vide* affidavit dated 3.9.2012 has clarified as under:
 - (a) In terms of Clause 3.2 of the PPA, the bulk power customer shall be responsible and shall make necessary arrangements separately with the concerned agency for evacuation of power and payments of evacuation charges etc., and NHPC shall not be responsible for the same in any manner.
 - (b) The scope of works entrusted to the petitioner as per Detailed Project Report (DPR) under RGGVY works on behalf of Government of J&K, under phase-I are:
 - (i) 66 kV transmission system with five nos. 66/11 kV sub-stations;
 - (ii) Rural Electrification works associated with 1038 Nos.BPL connections, later revised to 1665 Nos.
 - (d) The DPR for the respondent was sanctioned by REC *vide* letter dated 30.4.2008 and as per this the responsibility for implementing the project lies with the State Government in accordance with the TPA signed between the petitioner, REC and the Government of J&K. As per revised plan, the petitioner is executing the power evacuation system in Kargil on behalf of the respondent and the work is funded by REC under capital subsidy/loan assistance to Government of J&K and once the RGGVY works is completed, it will be handed over to the respondent for ultimate ownership of the RGGVY work. It is the responsibility of the respondent to make necessary arrangements for absorbing power after completion of sub-transmission system as per scope of work in DPR Phase-I. It is not the petitioner's responsibility to integrate the various islands of load under Phase-I of RGGVY.
 - (e) The Rural Electrification works aggregating 66.6 KW load cannot be considered to generate any demand vis-à-vis generation capacity of the generating station.
 - (f) Though the respondent had intimated the petitioner during 2004-05 that the estimated load in Kargil area would be 50 MW, it has failed to provide even 10 MW load as committed *vide* letter dated 23.7.2011. Since matching distribution system has not been developed by the respondent, this transmission capacity is not likely to be used in future. Hence, it may be not possible to run more than one machine even after all the five sub-stations are commissioned. The respondent has to develop rest of evacuation arrangement under phase-II in order to create optimum/full load. In view of the

above, the onus of failure to absorb the power from the generating station is solely with the respondent.

- (g) The reasons for the delay in completion of five sub-stations and associated connecting lines are as under:
 - (i) The evacuation arrangement was partially given to the petitioner under phase-I works on agency basis under RGGVY scheme through the TPA signed between the petitioner, the respondent and REC on 9.9.2005. The sanction to execute the works was accorded by REC on 30.4.2008 and works was awarded during October, 2008.
 - (ii) Bill of Quantities (BOQ) in contract of Kargil package was tentative as no survey was carried out by the respondent for RGGVY work. The petitioner/contractor conducted survey to firm up the BOQ and RCE Revised Cost Estimate (RCE) was submitted during January, 2010 to the respondent for acceptance and recommending the same to REC for sanction. The respondent took 27 months to process and obtain sanction of RCE from REC. However, the RCE was approved during March, 2012. Thus, the delay in recommending and approval of RCE has been hindrance for completion of work in time.
 - (iii) Though all state/local taxes are required to be borne by the State Government, the issue of work contract tax, entry tax etc on supply portion could not be resolved and due to this, the petitioner has been partially releasing supply bills of contractor leading to slow down of progress. No satisfactory resolution could be concluded till date due to which contractor is frequently stopping the work.
 - (iv) Problems related to land acquisition, statutory clearances including Right of way to be resolved by the State Government have caused delay in the completion of the works. In view of this, the onus of evacuation of power under RGGVY scheme lies with the respondent and the petitioner is in no way to be held responsible for delay in completion of evacuation system.
 - (v) Even though the petitioner has commissioned the highest capacity Kargil substation (2 x 6.3 MVA) along with the 66 kV transmission line connecting the generating station during November, 2011 the respondent is not providing the 10 MW load committed by it *vide* letter dated 23.7.2011 and instead only 2 to 3 MW load is being provided by the respondent.
 - (vi) The respondent vide its letter dated 24.6.2012 has intimated that the network connectivity in respect of Kargil substation is complete in all respects and the system is ready to take the load thus accepting its responsibility. Also, Gramthang sub-station is likely to be commissioned by September, 2012 and hardly any load is expected to be available at the sub-station.

- (vii) It is clear from the above that the respondent has failed to integrate the distribution network/islands of load with the sub-transmission network executed by the petitioner under RGGVY works with the result that the petitioner is unable to declare the commercial operation of the generating station.
- 11. Thereafter, the Commission in its record of the proceedings held on 6.9.2012 directed the respondent to file its submissions on the following issues:
 - (i) Incomplete transmission/evacuation system of the generating station.
 - (ii) The specific schedule for completion of evacuation under PPA.
- 12. In compliance with the above directions, the respondent *vide* its affidavit dated 25.10.2012 has submitted that the evacuation of full power from the generating station lies with the petitioner and not with the respondent for the following reasons:
 - (i) The services that the Government of J&K was to provide are enumerated in Clause 4.1 to 4.5 of the tripartite agreement and there is nothing on record to establish that there was any default on part of the respondent in providing the said services to the petitioner.
 - (ii) Besides developing the five substations (37.8 MVA) and the associated transmission lines, the petitioner was required to electrify un-electrified pockets and 1665 nos. BPL connections. Sufficient load shall be available once the petitioner finishes all the works under their scope as per MoU and the tripartite agreement.
 - (iii) The Record note of discussions held between the respondent, J&K Power Development Corporation, REC, MES and CEA on 6.3.2012 provides that:

"lesson from that experience is that Chutak HEP is being brought in a system comprising of isolated loads being served by DG sets in island mode. The load of each such island is restricted to peak hours of about five hours daily and the consumers are to use efficient CFL lamps. The islands are being integrated through 66 kV network being developed by NHPC under RGGVY and its pace is not consistent with HEP."

(iv) Clause 3.1 of the Tripartite Agreement specifically provides that the petitioner shall make all possible efforts to complete the projects within the approved time frame starting from the date of release of first instalments of funds by REC. The petitioner has miserably failed to meet its obligations as enumerated.

The petitioner vide its affidavit dated 21.11.2012 has reiterated its submissions made earlier and has also enclosed documentary evidence detailing the reasons for the delay in commissioning of works entrusted to the petitioner by the respondent on agency basis. The petitioner has also submitted that it has already commissioned two substations (viz., Kargil and Gramthang) to distribute the generated power at 11 kV through these sub-stations and pursuant to this, it is the jurisdiction of the respondent for connectivity and absorption of generated power by arranging suitable system and necessary load at the sub-stations. It has further submitted that it has undertaken the RGGVY scheme as per scope specified by the respondent and arranging 100% load of the installed capacity of the generating station at 11 kV feeders emanating from 5 Nos. 66/11 kV sub-stations by connecting various islands of loads to these feeders is the responsibility of the respondent. The petitioner has further added that after completion of two major substations (Kargil and Gramthang) with a transformation capacity of 18.9 MVA, which constitutes 50% of the total transformation capacity of 37.8 MVA under the scope of RGGVY, the total average load at these two substations is around 4 MW only against the available capacity of 33 MW. The petitioner also apprehends that even after commissioning of full transformation capacity of all the five sub-stations, the respondent may not be able to provide continuous full load of even one machine. The petitioner has further submitted that the respondent has failed to absorb the power generated from the generating station as per provisions of the PPA and the delay on this count is purely on the respondent which has failed in its commitment to provide sufficient load to the generating station.

14. We have considered the submissions and the documents available on record. Clause 3.2 of the PPA dated 26.10.2005 provides that the bulk power customer shall be responsible and shall make necessary arrangements separately with the concerned agency for evacuation of power and payment of evacuation charges etc and the petitioner shall not be responsible for the same in any manner. Though the evacuation of power was initially planned at 33 kV level through 220/33 kV network, the same was revised to 66/11 kV network by CEA during 2007. It is observed that the petitioner has been partially entrusted with the evacuation arrangement under Phase-I work on agency basis under the RGGVY scheme through the Tripartite Agreement entered into by the petitioner, the respondent and REC on 9.9.2005. Clause 4.1 to 4.5 of the said Tripartite Agreement contains the list of services to be provided by the Government of J&K during the construction of the project, which includes providing the petitioner with all information and necessary data with regard to technical aspects and other details required by the petitioner for implementation of the transmission project. It has been the specific contention of the petitioner in its rejoinder dated 3.9.2012 that the delay in the completion of evacuation system was mainly on account of the respondent. In response, the respondent in its reply dated 25.10.2012 has generally submitted that there was nothing on record to establish that there was any default on part of the respondent in the said services to the petitioner. It is apparent that the integration of various islands of 11 kV loads through 66/11 kV network (except for the 1665 BPL connections) is the responsibility of the respondent. Moreover, the transmission capacity of 37.8 MVA of the five substations which have been entrusted to the petitioner would not be sufficient for evacuation of full load of 44 MW from the generating station and the rest of the sub-stations under phase-II are yet to be developed by the respondent. As such, we are of the prima facie view that there has been default on the part of the respondent in providing services to the petitioner as per tripartite agreement towards the construction / commissioning of the evacuation system by the petitioner on behalf of the Government of J&K. There appears to be no provision for levying of Liquidated Damages either in PPA and TPA entered into by the respective parties towards the delay in the commissioning of the evacuation system. However, taking into consideration that serious differences and/or disputes have arisen between the parties, we are of the view that the parties are at liberty to invoke the provisions of arbitration as per clause 7.0 of the Tripartite Agreement.

15. The petitioner in its rejoinder has submitted that two substations viz Kargil (12.6 MVA) and Gramthang (6.3 MVA) along with connecting lines have been completed and load to the tune of 4 MW average and 11 MW (approx) during peak time is being provided by the respondent. The petitioner has also indicated that CEA *vide* order dated 14.11.2012 has declared two units viz Unit-2 and Unit-3, as commissioned w. e.f. 8.11.2012 and 11.11.2012, respectively. In view of the load availability of 11 MW, the petitioner is in a position to start the process of declaration of commercial operation of the units of the generating station, by giving notice to the beneficiary. Meanwhile petitioner *vide* affidavit dated 10.12.2012 has indicated that the date of commercial operation of three units have been declared on 29.11.2012 and scheduling has been started by SLDC, J&K. As such, the issue of declaration of commercial operation gets settled. Further, since the generating station is not connected to grid, the provisions of IEGC, except scheduling, shall not be applicable. Accordingly, we allow the prayer of the petitioner for exempting the generating station from the provisions of IEGC.

16. The prayer of the petitioner for recovery of annual fixed charges based on actual energy generated from the generating station as per the available load, considered in the above background, cannot be accepted, since the capacity charges are recoverable on monthly basis based on the available capacity declared by the generator depending upon water availability and has no relevance to the actual capacity scheduled by the beneficiaries. In this connection, Regulation 22 (2) of the 2009 Tariff Regulations which provides for recovery of monthly capacity charges reads as under:

"The capacity charge (inclusive of incentive) payable to a hydro generating station for calendar month shall be AFC x 0.5 x NDM / NDY x (PAFM / NAPAF) (in Rupees)

Where, Plant Availability Factor achieved during the month, in percentage (PAFM) is to be calculated based on the capacity declared by the generator and not on the basis of capacity scheduled by the beneficiaries."

- 17. In the circumstances, the petitioner shall be able to recover the capacity charges corresponding to the declared capacity depending upon the water availability. The constraints of the respondent in not making the available load commensurate to the declared capacity would not in any way hamper the recovery of capacity charges corresponding to capacity declared to be available by the petitioner. In view of this, the recovery of capacity charges by the petitioner shall be in terms of the provisions of the 2009 Tariff Regulations. Thus, the prayer of the petitioner on this count is answered accordingly.
- 18. As regarding recovery of Energy Charges, we notice that the formulae for recovery of monthly energy charge payable to the generator is with regard to the scheduled energy (ex-bus) and not with respect to the energy declared to be generated (ex-bus) by the generator depending upon the water availability during the

month. In this regard, Regulation 22 (4) of the 2009 Tariff Regulations provides as under:

"The energy charge shall be payable by every beneficiary for the total energy scheduled to be supplied to the beneficiary, excluding free energy, if any, during the calendar month, on ex power plant basis, at the computed energy charge rate. Total Energy charge payable to the generating company for a month shall be:

(Energy charge rate in Rs/kWh) x {Scheduled energy (ex-bus) for the month in kWh} x (100 - FEHS) / 100."

19. Taking into consideration that the recovery of energy charges shall be less if the beneficiary demands/schedules for lesser energy (than declared by the generator) due to non-availability of load, we, in exercise of power under Regulation 44 of the 2009 Tariff Regulations, relax the provisions of Clause (4) of Regulation 22 of the 2009 Tariff Regulations and allow the recovery of energy charges, corresponding to difference between energy declared to be generated and the energy scheduled by the beneficiary (due to non-availability of load) as deemed generation along with recovery of monthly energy charges for scheduled energy to be calculated as per provisions of the 2009 Tariff Regulations. The prayer of the petitioner is allowed in terms of the above.

Relaxation of Norms for NAPAF and Design Energy

20. The petitioner has prayed that the generating station may be allowed the relaxed norms for Normative Annual Plant Availability Factor (NAPAF) and Design Energy (DE) till full load is made available and the project is connected with regional grid/state grid whichever is later, as detailed at paragraph 12. It is noticed that the prayer of the petitioner in paragraph 12 of the interlocutory application relates to recovery of entire annual fixed charges based on actual energy generated from the project as per available load, which has been disposed of in terms of our findings in paragraphs 17 to 19 above of this order. Reverting to the prayer for relaxation of

NAPAF and DE, we notice that Regulation 27 of the 2009 Tariff Regulations provides the norms of operation applicable to hydrogenating stations and Regulation 27 (i) provides the criteria for determination of NAPAF of the hydrogenating stations. Based on the Design Energy of 212.93 MUs approved by CEA, the NAPAF of the generating station works out to 55% in terms of Regulation 27 (1) of the 2009 Tariff Regulations. The petitioner in this interlocutory application has submitted that to enable it to recover entire annual fixed charges, the actual MW loading on the units may be treated as installed capacity for calculating plant availability factor and actual annual generation may be treated as Design Energy of the generating station till the availability of sufficient load or connectivity with the regional /state grid whichever is later, if the units are available for generation. It is observed that the petitioner, in its original petition has prayed that NAPAF of 45% may be allowed for the generating station after accounting for 5% reduction due to high silt conditions and 5% reduction due to hostile climatic conditions which affect the operation and maintenance of the generating station. The prayer of the petitioner is examined in the subsequent paragraphs.

21. As regards high silt content likely to be encountered during the operation of the generating station, the petitioner has submitted as under:

"The petro graphic analysis of the river water sample shows 48.56% of the silt content lies in the range of 250-500 micron size and 36.2% in the range of 75-250 micron size. The analysis shows that the quartz present in the silt is extremely high in the range of 87% to 89%. Moreover, the quartz present in the silt content are of subangular to sub-rounded shape which is detrimental to from erosion point of view of the machines".

"BHEL, the OEM, vide their letter dated has informed that it is not recommended to operate the units for prolonged period under following conditions:

- When particles are over and above 200 microns
- Hardness of particles is more than 5 mhos's
- Concentration is above 200 PPM

22. In the above circumstances, the petitioner has prayed that the generating station may be allowed 5% allowance in NAPAF for high silt operating conditions. We have examined the matter. Regulation 27(1)(2) of the 2009 Tariff Regulations provides that:

"A further allowance may be made by the Commission in NAPAF determination under special circumstances, e,g abnormal silt problem or other operating conditions and known plant limitations"

- 23. On scrutiny, it is noticed that the petitioner has not submitted any justification to establish through data, the detail of the number of days/hours in a year during which the operation of the generating station would be affected due to the high silt conditions as envisaged by the OEM. Under these circumstances, we are not inclined to allow the prayer of the petitioner for 5% allowance in NAPAF of the generating station due to high silt operating conditions. However, the petitioner is at liberty to approach the Commission for relaxation in NAPAF due to high silt conditions and the same would be considered in accordance with law and is subject to production of records containing details of the number of days/hours in the first year of operation (after declaration of commercial operation) during which the generating station was affected due to high silt conditions and its impact on recovery of annual fixed charges.
- 24. The petitioner has also prayed for a further allowance of 5% in NAPAF of the generating station due to hostile conditions and has submitted as under:

"Chutak HE project being located at very high altitude of El. 2783 m., the weather remains at sub-zero temperature for almost six months in a year from January to March & October to December. It has been observed that the minimum temperature has reached to (-)22.30 $^{\circ}$ C,(-) 15.44 $^{\circ}$ C, (-)15.10 $^{\circ}$ C and (-)12.67 $^{\circ}$ C in the years 2006,2005,2004 and 2003 respectively.

25. The matter has been examined. Regulation 27(1)(3) of the 2009 Tariff Regulations provides as under:

"A further allowance of 5% may be allowed for difficulties in North East Region"

- 26. As stated, the provisions of Regulation 27(1) enables the Commission to allow 5% allowance in NAPAF for hydrogenating stations considering the difficulties in North East Regions. The generating station of the petitioner is situated in the State of J&K. Considering the fact that the environmental/climatic conditions in the State of J&K is more hostile than the regions of North East, we are inclined to allow 5% allowance in NAPAF for the generating station in relaxation of Regulation 27(1)(3) of the 2009 Tariff Regulations, in exercise of power under Regulation 44 of the 2009 Tariff Regulations.
- 27. Based on the above discussions, the NAPAF of the generating station is considered as 50% towards the recovery of capacity charges by the petitioner.

Infirm Power

28. The petitioner has submitted that the generating station is not connected to any grid (Regional/State) and hence the operation of machines will be in isolation mode. It has also submitted that as UI charges are calculated by the amount of deviation in actual generation with respect to scheduled generation, UI mechanism will not be applicable to the generating station, thereby depriving the petitioner the opportunity of supplying peaking power and supporting the grid. In the circumstances of isolation mode of operation, the petitioner has submitted that charging the infirm power at the rate of UI charges is not applicable and hence infirm power may be allowed to be charged at the rate of ₹1.65 kWh as provided by the Central Electricity Regulatory Commission (Unscheduled Interchange charges and related matters)

(second amendment) Regulations, 2012 ('UI Regulations, 2012'). The respondent has submitted that the petitioner does not qualify for a rate of ₹1.65/kWh for any infirm power under the UI Regulations, 2012, as the said regulations apply to fuel based grid connected generating stations and which operate under prescribed IEGC code. It has also submitted that since the generating station of the petitioner is not connected to the grid and does not generate as per grid norms, cannot take advantage of the said regulations.

- 29. The matter has been examined. As stated, the generating station is not connected to the grid and the operation of the machines is in isolation mode with generation to be matched with the available load. In the absence of connectivity to the grid, the applicable UI rate of ₹1.65/kWh, corresponding to the frequency in the range of 50.02 and 50 Hz., in terms of the UI Regulations, 2012, is allowed as the rate of infirm power injected/to be injected by the generating station.
- 30. With this, the prayers of the petitioner in the Interlocutory Application (I.A.No. 15/2012) stands disposed of. The original petition shall be set out for hearing in due course.

Sd/[M. Deena Dayalan]
Member

Sd/-[V.S. Verma] Member Sd/-[S. Jayaraman] Member