## BEFORE THE HIMACHAL PRADESH ELECTRICITY REGULATORY COMMISSION, SHIMLA

- M/S A.T. Hydro Private Limited, Plot No. 125, Road No. 71, Nav Nirman Nagar Colony, Jublilee Hills, Hyderabad-500033.
- 2. M/S Cimaron Constructions Private Limited Plot No. 125, Road No. 71, Nav Nirman Nagar Colony, Jublilee Hills, Hyderabad-500033.
- 3. M/S Taraila Power Limited, Plot No. 125, Road No. 71, Nav Nirman Nagar Colony, Jublilee Hills, Hyderabad-500033.

...Petitioner companies

V/s

The H.P. State Electricity Board Vidyut Bhawan, Shimla-4.

...Respondent

Petition No. 150 of 2008

(Decided on 23.1.2009)

CORAM YOGESH KHANNA, CHAIRMAN

Counsel:-

For the petitioner Sh. Ajay Vaidya,

Advocate

For the respondents Sh. Narinder Singh Thakur, Advocate.

## **ORDER**

(Last heard on 20.12.2008 and orders reserved)

M/S A.T. Hydro Private Limited; M/S Cimaron Constructions Private Limited; and M/S Taraila Power Limited (hereinafter referred as "the petitioner companies") are engaged in setting up Upper Taraila, Taraila-III and Tariala-III SHEPs, respectively, each of 5 MW capacity, at Tissa in Chamba

District in the State of Himachal Pradesh. The petitioner companies have signed Memo of Understanding (MOU) and Implementation Agreements (IA) with the State Govt. of Himachal Pradesh, whereunder the petitioner companies are to deliver energy of their respective projects to the Himachal Pradesh State Electricity Board (hereinafter referred as "the Board") through 33 kV single circuit lines at 33/132 kV Sub-station at Kurthala (Tissa) to be owned and operated by the Board. The energy deliverable by the petitioner companies is to be metered and energy accounting thereof is to be at the said Sub-station. The petitioner companies are also to make arrangements for evacuation of the energy generated from the places of generation to the Board's sub-station at Kurthala.

- 2. The petitioner companies have jointly undertaken a study for laying down the dedicated transmission lines from these three generation projects to Kurthala Sub-station of the Board and have found that instead of laying down totally independent and separate lines for the entire distance from their generation projects to Kurthala Sub-station it would be more conducive and economical for them to transmit electricity to Kurthala Sub-station through joint/common evacuation transmission lines (including through 33 kV single circuit line with WOLF conductor) from Taraila-II to Kurthala Sub-station. The petitioner companies further submit that the proposed joint power evacuation system will be beneficial and in public interest for the reason that-
  - (a) in view of way problems and the extreme constraints of corridors in the area, it would be difficult to arrange land separately for each project;
  - (b) it would be environment friendly because joint lines are likely to cause considerable reduction of transmission line coverage in the area and, is to help in conserving environment/ecology of the State, by involving cutting of lesser number of trees;
  - (c) cheaper, convenient and commercially expedient evacuation power system would be available to the generators.The petitioner companies also undertake to enter into interse

arrangements amongst themselves for metering energy and accounting of the deliverable energy from their generating projects.

- 3. In view of the facts delineated in the foregoing para the petitioner companies have filed the joint petition under sub-regulation (3) of regulation 3 of the HPERC (Power Procurement from Renewable Sources and Cogeneration by Distribution Licensee) Regulations, 2007 (hereinafter referred "the Power Procurement from Renewable as Sources, Regulations") for permission of this Commission to evacuate the energy to be generated from Upper-Taraila (5 MW), Taraila-II (5 MW) and Taraila-III (5 MW) Hydro Electric Generating Stations through the joint evacuation line, as per the sketch at Annexure A-2 to the petition which for some distance will be station specific and for the remaining distance will be jointly owned.
- 4. In response to the petition the Board submits that in the Kurthala Zone, where projects of the petitioner companies are located, the Master plan for evacuation of power from SHEPs includes provisions for -
  - (i) construction of 132/33 kV, 2x50/63 MVA Sub-station at Kurthala (near Tissa) with 132 kV D/C connectivity between Kurthala and Bathri Sub-Station of the Board;
  - (ii) in a later time frame, to facilitate evacuation of ultimate potential in the area, formulation of proposals for upgradation of the 132/33 kV Sub-station to 220/132/33 kV, 2x100 MVA capacity with 220 kV D/C (Twin MOOSE bundle configuration) connectivity with 220 kV Sub-Station at Karian (Chamba) which shall further be connected with 400/220 kV Sub-Station of Power Grid near Chamera-II HEP.
  - (iii) as per Hydro Power Policy of GoHP, proposals for evacuation of power from different Small HEPs to the pooling station of HPSEB through joint dedicated lines are to be encouraged.
- 5. Thus the Board is not averse to joint power evacuation arrangements proposed by the petitioners, as per single line diagram depicted in Annexure-A-2 to the petition provided that-
  - (a) the provision for proper protection, with switchgear of suitable capacities installed by the petitioners at the controlling Substation, is made and the single line diagram of the arrangement is got approved from the Board;

- (b) 33 kV line between the proposed controlling sub-station for joint evacuation and 33/132 sub-station at Kurthala is constructed with double circuit "WOLF" conductor, instead of single circuit proposed by the petitioner companies, as it would provide more reliability and relieve over loading on the proposed single circuit;
- (c) the petitioner companies should enter into an agreement amongst themselves for establishing, operating and maintaining the joint dedicated system upto 33/132 kV Sub-station at Kurthala in accordance with the electricity laws, rules and regulations including the Grid Code and Standards of Grid connectivity, technical standards for construction of lines and system of operation of such dedicated transmission system as per norms of system operation of concerned State and directions of the SLDC regarding operation of dedicated transmission system;
- (d) the petitioner companies should also spell out the arrangements of metering and accounting of energy to be delivered at the interconnection point of the Board and authorise one petitioner company for resolving the disputes regarding the billing of energy. The copy of interse agreement be supplied to the Board and one petitioner company.
- 6. The proposal for joint power evacuation system has also been discussed by the Empowered Committee, constituted under the Power Procurement from Renewable Sources Regulations, and same has been found technically feasible with the modifications that 2 Km 33 kV line proposed between controlling sub-station at Taraila-II and 132/33 kV Kurthala Sub-station be constructed as double circuit line on the same structure with WOLF conductor. The abstract of the discussions in the Empowered Committee is reproduced below:-

"The joint evacuation as proposed by M/S A.T. Hydro Power Ltd; M/S Cimaron Constructions (P) Ltd; and M/S Taraila Power Ltd; was discussed in the meeting. The proposal as evaluated by the office of the Chief Engineer (SP) was found technically suitable subject to the

condition that 33 kV single circuit with WOLF Conductor proposed between controlling substation (Taraila-II) to 132/33 kV Kurthala Substation shall be constructed as double circuit on same structure with Wolf Conductor. This modification in the proposal is necessary from reliability point of view, specifically with respect to terminal equipment at Kurthala. Director, HIMURJA stated that the feasibility of associating other SHPs which are likely to come up in the vicinity of this arrangement, may also be worked out and suitable space at controlling Sub-station proposed by the Consortium at Taraila-II for terminating additional 33 kV line may be kept accordingly.

The additional provisions/ guidelines for deemed generation shall be on similar lines as already specified vide order of the Commission in petition No. 254/06".

7. It would be appropriate to quote operative part of this Commission's order dated 25<sup>th</sup> August, 2007, passed in petition No. 254/2006- i.e. M/S Sai Krishna Hydro Energies Pvt. Ltd; and others V/s HPSEB:-

"In this background and after carefully going through the draft guidelines submitted by the HPSEB, the Commission clarifies that in cases where evacuation of power from the small projects (up to and including 5 MW) up to the interconnection point is done by IPPs through joint evacuation system and the entire power (excluding free power) is sold by such IPPs to the Board only on long term basis under the model PPA approved by the Commission for Small Hydro Power Projects (upto 5 MW), the deemed generation shall be allowed on similar lines as specified in the said model PPA, subject further to the following provisions/ guidelines:-

(i) All such IPPs evacuating power through a joint evacuation system upto the interconnection point shall sign an agreement amongst themselves in each case to sort out the modalities about the operation, maintenance, billing, receiving payments and accounting etc. inter alia including the apportionment of the saleable deemed generation and shall supply a copy of the same to the Board also. Such IPPs shall also nominate/authorize a single representative to deal with the Board for these matters. The Board shall sign the Interconnection Agreement only with such authorized representative of such

IPPs who shall also be responsible to ensure that dispatch instructions issued by the Board from time to time are complied with strictly by all the IPPs evacuating power through the joint evacuation system.

- (ii) All the projects (including generating stations, dedicated individual and/or joint lines and interconnection facilities) evacuating power through a joint evacuation system upto interconnection point shall be treated as a single project for the purposes of computation of the deemed generation, loss of generation/saleable deemed generation, which shall be computed for the period of interruption/outages on the basis of total energy injected vis-à-vis total dependable year generation/average generation of all the projects for relevant period in accordance with the provisions of model PPA, after duly taking into account the losses upto the interconnection point. However, if one or more projects (including generating stations, dedicated individual and/or joint lines and interconnection facilities) are under outages/breakdowns etc. in a particular period, the dependable year/ average generation for such project(s) shall not be taken into account for computing the loss of generation/saleable deemed generation for that period.
- (iii) The saleable, deemed generation payable by the Board as per the provisions of model PPA shall be apportioned by the Board among the IPPs in accordance with the agreement amongst the IPPs. In case of lack of clarity and/or dispute amongst the IPPs the saleable deemed generation shall be apportioned by the Board amongst IPPs according to its best judgment based on the data available and such apportionment shall be binding on all the IPPs.
- (iv) In cases where adequate Sub-transmission/ transmission system of the Board does not exist for evacuation of power from such projects, the benefits of deemed generation shall be allowed to such IPPs only from the date to be mutually agreed to in the PPA in line with the schedule of implementation of Mater Plan to be approved by the Commission in terms of the provisions of the Himachal Pradesh Electricity Regulatory Commission (Power Procurement from Renewable Sources and Co-generation by Distribution Licensee) Regulations, 2007.

- (v) It shall be the responsibility of IPPs to ensure that the conditions contained in the Grid Code and other relevant Codes and also such other conditions as may be prescribed and /or approved by the Commission from time to time, are fully complied with by them and the voltage regulation upto the point of injection into the Board's system is also maintained within permissible limits. The Board shall not be responsible for any loss due to non-compliance of such conditions and the loss of generation, if any, on this account shall not b counted to determining the saleable deemed generation.
- (vi) Either party may seek review for the amendment of these provisions/ guidelines from the Commission after giving notice to the other party, if it does not find it expedient to implement these provisions/ guidelines in case of joint evacuation system, and the decision of the Commission shall be binding on both the parties.

Note:- "The above provisions/guidelines will be applicable over and above the provisions/ conditions contained in model PPA for normal cases where power is injected into Board's system through individual lines".

- 8. The Commission, after going through the submissions made by the respective parties, hearing the arguments made by their Learned Counsels; and the deliberations of the Empowered Committee, accords its approval for evacuation of energy, to be generated from Upper-Taraila (5 MW), Taraila-II (5 MW) and Taraila-III (5 MW) Hydro Electric generating stations, through the joint evacuation line, as per the sketch at Annexure A-2 to the petition provided that-
  - (a) proper protection is made with switchgear of suitable capacities installed by the petitioner companies at the controlling Substations and the single line diagram of the arrangement is got approved from the Board;
  - (b) for joint evacuation 33 kV line between the proposed controlling Sub-station at Taraila-II and 132/33 kV Sub-station at Kurthala is constructed with double circuit "WOLF"

Conductor, instead of single circuit proposed by the petitioner companies;

- (c) the petitioner companies would enter into arrangement, amongst themselves, for metering and accounting of deliverable energy to the Board from their generation projects, and the petitioners would also designate and authorise one of the petitioner companies, for resolving the disputes regarding the billing of energy;
- (d) the petitioners will also enter into an agreement amongst themselves, for establishing, operating and maintaining the joint dedicated system upto 33/132 kV Sub-station at Kurthala in accordance with the electricity laws, rules and regulations including the Grid Code and standards of Grid connectivity, technical standards for construction of lines and per norms of system operation and directions of the SLDC regarding operation of dedicated transmission system;
- (e) the provisions/ guidelines for deemed generation shall be same as specified in the Commission order dated 25.8.2007 passed in petition No. 256/2006 i.e. M/s Sai Krishna Hydro Energies Ltd and others V/s HPSEB; (as reproduced in para 7 of this Order);
- (f) the petitioner companies would supply copies of interse arrangements, to be entered into by them, to the Board.

The Commission orders accordingly.

(Yogesh Khanna) Chairman